

Montana Office of Public Instruction

Denise Juneau, State Superintendent

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NCES Pri	ior to Seco	ondary School Courses	
Course	Course		
Grade	Code	Course Name	Course Description
01 - Englis	sh Language	e and Literature	
Comprehen	sive Langua	=	
	51008	English as a Second Language	English as a Second Language (ESL) courses are designed for the rapid mastery of the English language, focusing on reading, writing, speaking, and listening skills. ESL courses usually begin with extensive listening and speaking practice, building on auditory and oral skills, and then move on to reading and writing. These courses provide an explanation of basic structures of the English language, enabling students to progress from an elementary understanding of English words and verb tenses to a more comprehensive grasp of various formal and informal styles and then to advance to "regular" English courses. ESL classes may also include an orientation to the customs and culture of the diverse population in the United States.
7	51035	Language Arts (grade 7)	Language Arts (grade 7) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing, and include the four aspects of language use: reading, writing, speaking, and listening. Beyond emphasizing different uses for language, these courses may also include using language (particularly written text) to construct meaning and connections. Specific content depends upon state standards for grade 7.
8	51036	Language Arts (grade 8)	Language Arts (grade 8) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing, and include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses use various genres of literature to improve reading skills, and they link writing exercises for different purposes to those reading selections. Specific content depends upon state standards for grade 8.
	51037	Language Arts	Code 51037, representing Language Arts courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do"), or when the content descriptions above (Language Arts, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated in this course code.
Literature/R	Reading		
7	51047	Reading (grade 7)	Reading (grade 7) courses build upon students' prior knowledge and skill in reading and may emphasize the use of language for different effects, in different contexts, and for different purposes. Specific content depends upon state standards for grade 7.
8	51048	Reading (grade 8)	Reading (grade 8) courses build upon students' prior knowledge and skill in reading. Typically, these courses use various genres of literature to improve reading skills, and link exercises for different purposes to those reading selections. Specific content depends upon state standards for grade 8.
	51049	Reading	Code 51049, representing Reading courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do"), or when the content descriptions above (Reading, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.
Compositio	n/Writing		
7	51137	Writing (grade 7)	Writing (grade 7) courses build upon students' prior knowledge and skill in writing and may emphasize the use of language for different effects and to construct meaning and connections. Specific content depends upon state standards for grade 7.
8	51138	Writing (grade 8)	Writing (grade 8) courses build upon students' prior knowledge and skill in writing. Typically, these courses use writing exercises to expand students' understanding of the different purposes of written communication. Specific content depends upon state standards for grade 8.

NCES Pric	or to S	econdary	School	Courses
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Course		
Code	Course Name	Course Description
	and Literature	
51139	Writing	Code 51139, representing Writing courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do"), or when the content descriptions above (Writing, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.
natics		
Mathematics		
52002	General Math	General Math courses reinforce and expand students' foundational math skills, such as arithmetic operations using rational numbers; area, perimeter, and volume of geometric figures, congruence and similarity, angle relationships, the Pythagorean theorem, the rectangular coordinate system, sets and logic, ratio and proportion, estimation, formulas, solving and graphing simple equations and inequalities.
52037	Mathematics (grade 7)	Mathematics (grade 7) courses typically emphasize proficiency in skills involving numbers and operations; measurement; patterns; functions; algebraic formulas; geometry; and concepts of data analysis, including statistics and probability. Specific content depends upon state standards for grade 7.
52038	Mathematics (grade 8)	Mathematics (grade 8) courses typically emphasize proficiency in skills involving numbers and operations, measurement, patterns, simple functions, algebra, geometry, statistics, and probability. Specific content depends upon state standards for grade 8.
52039	Mathematics	Code 52039, representing Mathematics courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do"), or when the content descriptions above (Mathematics, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.
natics		
52051	Pre-Algebra	Pre-Algebra courses increase students' foundational math skills and prepare them for Algebra I by covering a variety of topics, such as properties of rational numbers (i.e., number theory), ratio, proportion, estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first-degree equations and inequalities.
52052	Algebra I	Algebra I courses include the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.
52072	Geometry	Geometry courses, emphasizing an abstract, formal approach to the study of geometry, typically include topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.
52132	IB Mathematics, Middle Years Program	International Baccalaureate (IB) Mathematics, Middle Years Program courses are built on a framework of five branches of mathematics: number, algebra, geometry and trigonometry, statistics and probability, and discrete mathematics. The program encourages students to develop an understanding of mathematical reasoning and processes, the ability to apply mathematics and evaluate the significance of results, the ability to develop strategies for problems in which solutions are not obvious, and the acquisition of mathematical intuition.
d Physical S	Sciences	
e		
53008	Earth/Space Science	Earth/Space Science covers basic principles of earth and space science. These may include plate tectonics, rocks and the rock cycle, weather, ocean currents, movements of the Earth, moon, and planets, components of the galaxy and universe, or other topics consistent with state academic standards for earth and space science.
53051	Biology	Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy.
•	Code n Language n/Writing 51139 matics Mathematics 52002 52037 52038 52039 matics 52051 52052 52072 52132 d Physical Size 53008	A Language and Literature A Language and Literature A Writing 51139 Writing Mathematics 52002 General Math 52037 Mathematics (grade 7) 52038 Mathematics (grade 8) 52039 Mathematics 52051 Pre-Algebra 52052 Algebra I 52072 Geometry 52132 IB Mathematics, Middle Years Program d Physical Sciences 22 Sanguage and Literature 1

NCES Prior to Secondary School Courses

Course	Course		
Grade	Code	Course Name	Course Description
)3 - Life ar	nd Physical	Sciences	
Physics			
	53158	Life Science	Life Science courses cover the basic principles of life and life processes. These topics may include cells, species, ecosystems, reproduction, genetics, or other topics consistent with state academic standards for life science.
	53159	Physical Science (prior-to-secondary)	Physical Science (prior-to-secondary) courses cover basic principles of physical science, such as matter, energy, force, and motion. Topics may include conservation of energy and matter, the atomic model, the periodic table, electricity, or other topics consistent with state academic standards for physical science.
ntegrated/0	Other		
	53203	IB Sciences, Middle Years Program	International Baccalaureate (IB) Sciences, Middle Years Program courses provide to students a body of knowledge and an understanding of the scientific approach to problem solving. It may be organized as biology, chemistry, and physics, or as an integrated sciences course. The course requires students to formulate hypotheses, design and carry out experiments to test them, and evaluate results.
7	53237	Science (grade 7)	Science (grade 7) courses build on previous years of scientific inquiry and typically include subject matter from several strands of science, including earth sciences, physical sciences, and life or environmental sciences, and may organize material around thematic units. Specific content depends upon state standards for grade 7.
8	53238	Science (grade 8)	Science (grade 8) courses typically include subject matter from several strands of science, including earth sciences, physical sciences, and life or environmental sciences, and may organize material around thematic units. Specific content depends upon state standards for grade 8.
	53239	Science	Code 53239, representing Science courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do"), or when the content descriptions above (Science, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.
)4 - Social	Sciences a	nd History	
Seography		•	
	54001	World Geography	World Geography courses provide students with an overview of world geography, but may vary widely in the topics they cover. Topics typically include the physical environment; the political landscape; the relationship between people and the land; economic production and development; and the movement of people, goods, and ideas.
	54003	U.S. Geography	U.S. Geography courses provide an overview of the geography of the United States. Topics typically include the physical environment, the political landscape, the relationship between people and the land, and economic production and development.
Vorld Histo	ry		
	54051	World History—Overview	World History—Overview courses provide students with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments. World History—Overview courses may include geographical studies, but often these components are not as explicitly taught as geography.
	54063	Western Civilization	Western Civilization courses apply an interdisciplinary approach to the study of western cultural traditions, frequently using a chronological framework. Course content typically includes a survey of the major developments in and contributors to art and architecture, literature, religion and philosophy, and culture. These courses may also cover intellectual and political movements.
J.S. History	Ī		
	54105	State-Specific Studies	State-Specific Studies courses examine the history, politics, economics, society, and/or cultures of one state in the United States. This course may focus primarily on the history of that state or may take an interdisciplinary approach to the contemporary issues affecting it.
Bovernmen	t, Politics, an		
	54161	Civics	Civics courses examine the general structure and functions of American systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system. These courses do not typically delve into the same degree of detail on constitutional principles or the role of political parties and interest groups as do comprehensive courses in U.S. Government.

NCES	Prior	to	Secondary	Sc	hool	Courses
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Course	Course		
Grade	Code	Course Name	Course Description
04 - Social	l Sciences a	nd History	
Governmen	nt, Politics, an	d Law	
	54171	IB Humanities, Middle Years Program	International Baccalaureate (IB) Humanities, Middle Years Program courses aim to develop the understanding and application of concepts (time, place and space, change, systems and global awareness) and skills (technical, analytical, problem solving, and investigative). Content may include topics such as geography, history, economics, politics, civics, sociology, anthropology, and psychology.
	cial Studies		
7	54437	Social Studies (grade 7)	Social Studies (grade 7) courses provide continued development of understanding and skills in the social studies disciplines: history, geography, civics and government, and economics. Specific content depends upon state standards for grade 7.
8	54438	Social Studies (grade 8)	Social Studies (grade 8) courses provide continued development of understanding and skills in the social studies disciplines: history, geography, civics and government, and economics. Typically, these courses focus on single disciplines at a time (e.g., state-specific history and government, U.S. history, world history, or civics) to develop discipline-related skills. Specific content depends upon state standards for grade 8.
	54439	Social Studies	Code 54439, representing Social Studies courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do"), or when the content descriptions above (Social Studies, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.
05 - Fine a	nd Performi	ing Arts	
Dance			
Drama	55039	Dance	Code 55039, representing Dance courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do"), or when the content descriptions above (Dance, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.
Diama	55079	Drama	Code 55079, representing Drama courses that are not grade differentiated, should be used when a
			state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do"), or when the content descriptions above (Drama, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.
Music			
	55101	General Band	General Band courses develop students' technique for playing brass, woodwind, and percussion instruments and cover a variety of nonspecified band literature styles (concert, marching, orchestral, and modern styles).
	55103	Marching Band	Courses in Marching Band are intended to develop students' technique for playing brass, woodwind, and percussion instruments and cover appropriate band literature styles, primarily for marching performances.
	55104	Orchestra	Orchestra courses are designed to develop students' abilities to play brass, woodwind, percussion, and string instruments, covering a variety of string and orchestral literature styles.
	55110	Chorus	Chorus courses provide the opportunity to sing a variety of choral literature styles for men's and/or women's voices and are designed to develop vocal techniques and the ability to sing parts.
7	55137	Music (grade 7)	Music (grade 7) courses enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and refining the ability to discern and critique. Specific course content conforms to any existing state standards for grade 7.
8	55138	Music (grade 8)	Music (grade 8) courses enable students to create and perform music, listen and respond to musical compositions, and incorporate their musical experiences with other activities and subjects. Course content usually involves understanding music as creative expression and communication, developing skill with the voice and/or musical instruments, and refining the ability to discern and critique. Specific course content conforms to any existing state standards for grade 8.

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Course Grade	Course Code	Course Name	Course Description
05 - Fine ar			Ourse Description
Music		3	
	55139	Music	Code 55139, representing Music courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do"), or when the content descriptions above (Music, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.
Visual Arts			asimo milon gradas may as masipolatica sy uno scarco acco.
	55167	Photography	Photography courses expose students to the materials, processes, and artistic techniques of taking artistic photographs. Students learn about the operation of a camera, composition, lighting techniques, depth of field, filters, camera angles, and film development. The course may cover black-and-white photography, color photography, or both. As students advance, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic style. These courses may also cover major photographers, art movements, and styles.
7	55187	Art (grade 7)	Art (grade 7) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, make connections to other content areas, develop their own aesthetic, and strengthen their critical abilities. Although typically involving the visual arts (drawing, painting, sculpture, crafts, and the like), these courses may also include other forms of art (for example, dance, music, and theater). Specific course content conforms to any existing state standards for
8	55188	Art (grade 8)	grade 7. Art (grade 8) courses provide to students activities that foster creative expression, communication through artistic endeavor, and appreciation of culture and heritage. Activities may include those that enable students to refine their technique, increase their artistic vocabulary, express themselves and their world view, make connections to other content areas, develop their own aesthetic, and strengthen their critical abilities. Although typically involving the visual arts (drawing, painting, sculpture, crafts, and the like), these courses may also include other forms of art (for example, dance, music, and theater). Specific course content conforms to any existing state standards for
	55189	Art	grade 8. Code 55189, representing Art courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by third grade, students should know and be able to do"), or when the content descriptions above (Art, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to
All Others			define which grades may be incorporated by this course code.
	55202	IB Arts, Middle Years Program	International Baccalaureate (IB) Arts, Middle Years Program courses include visual and performing arts and organize learning around the creative cycle. These courses bring students into contact with art forms and aesthetic values of several cultures and help students master artistic techniques.
7	56037	Foreign Language (grade 7)	Foreign Language (grade 7) courses emphasize the language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Grammar and syntax, vocabulary, and applicable accents typically are studied so that students have the knowledge and ability to express themselves and understand others. Students usually explore the customs, history, and art forms of the people(s) whose language is being studied. Specific content depends upon state standards for grade 7.
8	56038	Foreign Language (grade 8)	Foreign Language (grade 8) courses emphasize the language arts skills (listening, speaking, reading, and writing) necessary to communicate in a foreign language. Grammar and syntax, vocabulary, and applicable accents typically are studied so that students have the knowledge and ability to express themselves and understand others. Students usually explore the customs, history, and art forms of the people(s) whose language is being studied. Specific content depends upon state standards for grade 8.
	56039	Foreign Language	Code 56039, representing Foreign Language courses that are not grade differentiated, should be used when a state or locality does not have or does not employ grade-level content standards, when those standards may apply to a range of consecutive grades (e.g., "by 3rd grade, students should know and be able to do"), or when the content descriptions above (Foreign Language, early childhood education through grade 8) do not fit the courses offered. The grade span element should be included to define which grades may be incorporated by this course code.

NCES Prior to Secondary School Courses

Course (Course		
Grade (Code	Course Name	Course Description
)6 - Foreign L	anguage	and Literature	
Romance Lang	uages		
5	56100	Spanish	Spanish courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the Spanish language and students' knowledge of Spanish-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s).
5	6101	IB Language B (Spanish), Middle Years Program	International Baccalaureate (IB) Language B (Spanish), Middle Years Program courses enable students to gain competence in modern Spanish; these courses also encourage respect for and understanding of other languages and cultures.
	56120	French	French courses introduce and then extend students' skills in speaking, reading, writing, and comprehending the French language and students' knowledge of French-speaking cultures. Initial courses emphasize grammar and syntax, vocabulary, and the spoken accent so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of French-speaking people to deepen their understanding of the culture(s).
	00121	IB Language B (French), Middle Years Program	International Baccalaureate (IB) Language B (French), Middle Years Program courses enable students to gain competence in modern French and encourage respect for and understanding of other languages and cultures.
reek Languag	е		
5	6281	IB Language B (Greek), Middle Years Program	This course allows students to gain competence in modern Greek and encourages respect for and understanding of other languages and cultures.
ast Asian Lan	guages		
5	56441	IB Language B (korean), Middle Years Program	International Baccalaureate (IB) Language B (korean), Middle Years Program courses enable students to gain competence in modern korean and encourage respect for and understanding of other languages and cultures.
outheast Asia	n/Austral-	Asian Languages	
5	66501	IB Language B (Vietnamese), Middle Years Program	International Baccalaureate (IB) Language B (Vietnamese), Middle Years Program courses enable students to gain competence in modern Vietnamese and encourage respect for and understanding of other languages and cultures.
5	56521	IB Language B (Filipino), Middle Years Program	IB (International Baccalaureate) Language B (Filipino), Middle Years Program courses enable students to gain competence in modern Filipino and encourage respect for and understanding of other languages and cultures.
emitic and Nea	ar/Middle l	Eastern Languages	
	56701	IB Language B (Hebrew), Middle Years Program	International Baccalaureate (IB) Language B (Hebrew), Middle Years Program courses enable students to gain competence in modern Hebrew and encourage respect for and understanding of other languages and cultures.
frican (non-Se	emitic) Lan	guages	
5	66761	IB Language B (Swahili), Middle Years Program	International Baccalaureate (IB) Language B (Swahili), Middle Years Program courses allow students to gain competence in modern Swahili and encourage respect for and understanding of other languages and cultures.
merican Sign	Language		
5	56800	American Sign Language	American Sign Language courses introduce and then extend students' ability to communicate with deaf persons through finger spelling, signed words, and gestures. Initial courses emphasize vocabulary and physical expression so that students have an understanding of the language and its rules and conventions. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others), seeking to enable students to express more complex concepts, and to do so more easily. Course topics may include the culture of and issues facing deaf people.

NCES Prior to Secondar	y School Courses
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Course Grade	Course Code	Course Name	Course Deceriation
		Course Name e and Literature	Course Description
•	dian Langua		
	56820	American Indian Language	American Indian Language courses introduce and then extend students' skills in speaking, reading, writing, and comprehending an American Indian language (e.g., Navajo, Cherokee, and kree) and students' knowledge of Native American cultures. Initial courses emphasize grammar and syntax, vocabulary, and vocal tones so that students have an understanding of the language and its rules. Later courses advance students' knowledge and ability to express themselves beyond basic communication (and to understand others, either in a written or verbal format), seeking to enable students to express more complex concepts, in different tenses, and to do so more easily. Students usually explore the customs, history, and art forms of Native American people to deepen their understanding of the culture(s).
All Others	56997	Foreign Longuage and	Foreign Language and Literature Independent Study courses often conducted with instructors of
	00007	Foreign Language and Literature—Independent Study	Foreign Language and Literature—Independent Study courses, often conducted with instructors as mentors, enable students to explore foreign language-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular language, to explore a topic in greater detail, or to develop more advanced skills.
	56999	Foreign Language and	
	57001	Literature—Other Religious Foundations	Religious Foundations courses' primary objectives include instruction in the history, tenets, and organization of a religion; development of personal faith and conviction; and exposure to the ways in which daily life may reflect personal religious beliefs. These courses typically include various components particular to a specific religion, such as religious sacraments and symbols, food laws, the authority and structure of the church, the church calendar, and so on.
	57005	Scriptures	Scriptures courses emphasize understanding and interpreting the sacred writings of a faith (such as the Bible, Torah, koran, Book of Mormon, and so on) from the standpoint of a religious faith. Course objectives are designed so that students may comprehend the theological, doctrinal, and ethical messages contained within religious scriptures.
	57006	Old Testament	Old Testament courses emphasize understanding and interpreting the sacred writings of the Old Testament from the standpoint of a religious faith and may focus on one or several books. Course content typically focuses on themes, theological concepts, and portrayal of ethical messages, but may also include critique and commentary.
	57007	New Testament	New Testament courses emphasize understanding and interpreting the sacred writings of the New Testament from the standpoint of a religious faith and may focus on one or several religious books. Course content typically focuses on themes, theological concepts, and portrayal of ethical messages, but may also include critique and commentary.
	57008	Bible History	Bible History courses treat the Bible as a historical document and provide an overview of significant biblical events. The content usually includes geography; the relationship among cultures, belief systems, and the events chronicled in the Bible; and early Jewish or Christian Church history.
	57015	Faith and Lifestyle	Faith and Lifestyle courses focus on the development of young adults from puberty to adulthood, approached from the perspective of a faith or church. In these courses, the religion's values and traditions provide an underpinning for examining such topics as identity, independence, sexuality, employment, and leisure. Typically, Faith and Lifestyle courses include discussions about adult roles—single life, marriage, religious life, and ordained ministry.
	57997	Religious Education and Theology—Independent Study	Religious Education and Theology—Independent Study courses, often conducted with instructors, members of the clergy, or religious leaders as mentors, enable students to explore topics of interest related to religion or theology. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular religion, to explore a topic in greater detail, or to develop more advanced skills.
	57999	Religious Education and Theology—Other	
-		and Safety Education	
Physical Ed	58001	Physical Education	Physical Education courses provide students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities.
	58005	Fitness/Conditioning Activities	Fitness/Conditioning Activities courses emphasize conditioning activities that help develop muscular
	58007	Adapted Physical Education	strength, flexibility, and cardiovascular fitness. These courses provide physical education activities (sports, fitness, and conditioning) adapted for students with special needs.
	58014	Physical Education Equivalent	These courses award physical education credit for other at-school activities, such as marching band or cheerleading. (Dance is included under the Fine and Performing Arts subject area.)

NCES Prior to Secondary School Courses

Course

Course

Grade Code Course Name Course Description

08 - Physical, Health, and Safety Education

Physical Education 58051

051 Health Education

Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The courses may also include brief studies of environmental health, personal development, and/or community resources.

Introduction to Computer courses introduce students to computers and peripheral devices, the functions and uses of computers, the language used in the computer industry, possible applications of computers, and occupations related to computer hardware and software. These courses typically explore legal and ethical issues associated with computer use, as well as how computers influence modern society. Students may also be required to perform some computer operations.

In Computer Applications courses, students acquire knowledge of and experience in the proper and efficient use of previously written software packages. These courses explore a wide range of applications, including (but not limited to) word-processing, spreadsheet, graphics, and database

programs, and they may also cover the use of electronic mail and desktop publishing.

010 - Computer and Information Sciences

Computer Literacy

60001

Introduction to Computers

60004

Computer Applications

Media Technology

60201

Web Page Design

Web Page Design courses teach students how to design web sites by introducing them to and refining their knowledge of site planning, page layout, graphic design, and the use of markup languages—such as Extensible Hypertext Markup, JavaScript, Dynamic HTML, and Document Object Model—to develop and maintain a web page. These courses may also cover security and privacy issues, copyright infringement, trademarks, and other legal issues relating to the use of the Internet. Advanced topics may include the use of forms and scripts for database access, transfer methods, and networking fundamentals.

Audio/Visual Production courses provide students with the knowledge and skills necessary for television, video, film, and/or radio production. Writing scripts, camera operation, use of graphics and other visuals, lighting, audio techniques, editing, production principles, and career opportunities are typical topics covered within production courses. Students are usually required to produce their own program or segment. Additional topics such as broadcast industry regulations, radio/TV operation, power of the medium, photography, transmission technology, and so on may be

Journalism courses (typically associated with the production of a school newspaper, yearbook, or literary magazine) emphasize writing style and technique as well as production values and organization. Journalism courses introduce students to the concepts of newsworthiness and press responsibility; develop students' skills in writing and editing stories, headlines, and captions; and teach students the principles of production design, layout, and printing. Photography and

Photojournalism courses expose students to the manner in which photography is used to convey information and experiences. Typically coordinated with production of the school newspaper, yearbook, or other media product, photojournalism courses provide students with the opportunity to improve their photo composition and film development skills, and to apply their art to journalistic

011 - Communications and Audio/Visual Technology

Audio and Video Technology and Film

61051

Audio/Visual Production

included.

photojournalism skills may be included.

Other Journalism and Broadcasting courses.

Journalism and Broadcasting

61101

Journalism

61102

Photojournalism

61149

Journalism and

Broadcasting—Other

Printing Technology and Production

61152

Desktop Publishing

Desktop Publishing courses integrate the knowledge and skills learning in word processing with the concepts, procedures and application of desktop publishing. Students learn to format, create and proofread brochures, programs, newsletters, web pages, presentations and manuscripts.

012 - Business and marketing

Administration

62001

Business/Office Career

Exploration

Business/Office Career Exploration courses expose students to the occupational opportunities available in the accounting, administration, data processing, management, and secretarial fields. Emphasis is placed on responsibilities, qualifications, work environment, and career paths. These courses may also include consumer education topics, keyboard exposure, and/or hands-on experience within the various occupational areas.

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NCES Prior to Secondary School Courses

Course	Course		
Grade	Code	Course Name	Course Description
012 - Busin	ess and m	arketing	
Administration			
	62005	keyboarding	keyboarding courses provide students with an introduction to the keyboard (letters, numbers, and symbols), basic machine operation, and proper keystroke technique. As students progress, they improve their speed and accuracy and produce increasingly complex documents. Such courses help students develop keyboard proficiency, document production skills, and problem-solving skills.
	62006	Word Processing	Word Processing courses introduce students to automated document production using one or more software packages. These courses may introduce keyboarding techniques or may require prior experience; in either case, speed and accuracy are emphasized. A parallel focus is placed on the use of software commands and functions to create, edit, format, and manipulate documents, capitalizing on the power offered by word processing software programs. These courses may also cover file and disk management and other computer-related skills.
013 - Manuf	facturing		
Manufacturir	_	==	
	63003	Industrial Arts	Industrial Arts courses expose students to the tools and machines that they may encounter in manufacturing-related occupations and enable them to develop the skills they need to use these tools in various applications. Course topics typically include (but are not limited to) drawing and planning, electricity, graphic arts, woodwork, leatherwork, metalwork, plastics, and power technology. These courses typically cover general safety and career exploration as well.
014 - Health	n Care Scie	ences	
All Others			
	66997	Hospitality and Tourism—Independent Study	Hospitality and Tourism—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within the hospitality and tourism industry. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater datail, or to develop more advanced skills.
	66999	Hospitality and Tourism—Other	application, to explore a topic in greater detail, or to develop more advanced skills.
	67001	Construction Careers Exploration	Construction Career Exploration courses expose students to the opportunities available in
			construction-related trades, such as carpentry, masonry, air conditioning/refrigeration, plumbing, and so on. Students learn about the processes involved in construction projects and may engage in a variety of small projects. These courses emphasize responsibilities, qualifications, work environment, rewards, and career paths within construction-related fields.
	67002	Construction—Comprehensive	Construction—Comprehensive courses provide the basic knowledge and skills required for construction of commercial, residential, and institutional structures. These courses provide experiences and information (typically including career opportunities and training requirements) regarding construction-related occupations such as carpentry, cabinetmaking, bricklaying, electrical trades, plumbing, concrete masonry, and so on. Students engage in activities such as reading blueprints, preparing building sites, starting foundations, erecting structures, installing utilities, finishing surfaces, and providing maintenance.
	67997	Architecture and Construction—Independent	Architecture and Construction—Independent Study courses, often conducted with instructors as mentors, enable students to explore architecture and construction-related topics of interest.
		Study	Independent Study courses may serve as an opportunity for students to expand their expertise in a
	67999	Architecture and Construction—Other	particular application, to explore a topic in greater detail, or to develop more advanced skills.
021 - Engin	eering and	d Technology	
Engineering			
	71009	Robotics	Robotics courses develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers.
Drafting			
	71102	Drafting—General	Drafting—General courses, usually offered as a sequence of courses, introduce students to the technical craft of drawing illustrations to represent and/or analyze design specifications and then refine the skills necessary for this craft. Drafting—General courses use exercises from a variety of applications to provide students with the knowledge and experience to develop the ability to perform freehand sketching, lettering, geometric construction, and multiview projections and to produce various types of drawings (working, detail, assembly, schematic, perspective, and so on). Computer-aided drafting (CAD) systems (if available) are typically introduced and used to fulfill course objectives.

All Others

NCES Prior to Secondary School Courses

Course	Course		
Grade	Code	Course Name	Course Description
•	neering and	Technology	
All Others	72001	Standardized Test Preparation	Standardized Test Preparation courses help to prepare students for national standardized tests. In particular, these courses assist students in developing and/or expanding their vocabulary, test-taking, and reasoning skills through study, lecture, and practice drills. Course topics may include vocabulary review; root words, prefixes, and suffixes; mathematical concepts, logic, and
	72003	Study Skills	rules; and general problem-solving and test-taking strategies. Study Skills courses prepare students for success in high school and/or postsecondary education. Course topics may vary according to the students involved, but typically include reading improvement skills, such as scanning, note-taking, and outlining; library and research skills; listening and note taking; vocabulary skills; and test-taking skills. The courses may also include exercises
	72006	Study Hall	designed to generate organized, logical thinking and writing. Study Hall courses provide the opportunity and time for students to complete classroom assignments or school projects. Students typically work on their own, without the help of a tutor; however, they are supervised and usually remain in the classroom.
022 - Misce	ellaneous		
School Orga	anization/Lea	dership	
	72101	Leadership	Leadership courses are designed to strengthen students' personal and group leadership skills. Typically intended for students involved in extracurricular activities (especially as officers of organizations or student governing bodies), these courses may cover such topics as public speaking, effective communication, human relations, parliamentary law and procedures, organization and management, and group dynamics.
	72104	Community Service	Community Service courses provide students with the opportunity to volunteer their time, energy, and talents to serve a community project or organization. These courses are usually (but not always) conducted with a seminar component, so that students can use their volunteer experiences to learn how to solve problems, make decisions, and communicate effectively.
Career Expl	oration/Deve	·	
	72151	Career Exploration	Career Exploration courses help students identify and evaluate personal goals, priorities, aptitudes, and interests with the goal of helping them make informed decisions about their careers. These courses expose students to various sources of information on career and training options and may also assist them in developing job search and employability skills.
Family and	Consumer So		
	72202	Food and Nutrition	Food and Nutrition courses provide an understanding of food's role in society, instruction in how to plan and prepare meals, experience in the proper use of equipment and utensils, and background on the nutritional needs and requirements for healthy living. Some classes place a heavier emphasis on the nutritional components of a balanced diet, while others concentrate on specific types of food preparation. Although these courses may present career opportunities in the food service industry, their emphasis is not career related.
	72205	Clothing/Sewing	Clothing/Sewing courses introduce students to and expand their knowledge of various aspects of wearing apparel, sewing, and fashion. These courses typically include wardrobe planning; selection, care, and repair of various materials; and construction of one or more garments. They may also include related topics, such as fashion design, fashion history, the social and psychological aspects of clothing, careers in the clothing industry, and craft sewing.
	72206	Life Skills	Life Skills courses provide information about a wide range of subjects to assist students in becoming wise consumers and productive adults. These courses often emphasize such topics as goal setting, decisionmaking, and setting priorities; money and time management; relationships; and the development of the self. Practical exercises regarding selecting and furnishing houses, meeting transportation needs, preparing food, selecting clothing, and building a wardrobe are often integral to these classes. In addition, specific topics such as insurance, taxation, and consumer protection may also be covered.
All Others	72250	Exploratory	Exploratory courses provide a brief introduction to a variety of topics, typically elective subject areas, often in the form of discrete units or modules. Students may choose to take courses later that allow them to pursue the topics introduced in more depth. Topics may vary widely and span
	72995	Miscellaneous—Aide	multiple subject areas within one course. Miscellaneous—Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula or to assist other staff members in fulfilling their duties. Students may provide tutorial or instructional assistance to other students. Note: if the particular
	72999	Miscellaneous—Other	subject area is known, use the code associated with the Aide course within that subject area. Other Miscellaneous courses.

NCES Prior to Secondary School Courses

Course	Course		
Grade	Code	Course Name	Course Description
022 - Misc	ellaneous		
All Others			
Pk	73029	Pre-kindergarten	Code 73029 represents Pre-kindergarten courses that are not differentiated by subject area—that
			is, instances in which students are enrolled in a grade-specified course and are taught various
			subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course
			content depends upon state standards for pre-kindergarten.
k	73030	kindergarten	Code 73030 represents kindergarten courses that are not differentiated by subject area—that is,
			instances in which students are enrolled in a grade-specified course and are taught various
			subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course
			content depends upon state standards for kindergarten.
1	73031	Grade 1	Code 73031 represents Grade 1 courses that are not differentiated by subject area—that is,
			instances in which students are enrolled in a grade-specified course and are taught various
			subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course
			content depends upon state standards for grade 1.
2	73032	Grade 2	Code 73032 represents Grade 2 courses that are not differentiated by subject area—that is,
			instances in which students are enrolled in a grade-specified course and are taught various
			subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course
			content depends upon state standards for grade 2.
3	73033	Grade 3	Code 73033 represents Grade 3 courses that are not differentiated by subject area—that is,
			instances in which students are enrolled in a grade-specified course and are taught various
			subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course
			content depends upon state standards for grade 3.
4	73034	Grade 4	Code 73034 represents Grade 4 courses that are not differentiated by subject area—that is,
			instances in which students are enrolled in a grade-specified course and are taught various
			subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course
_			content depends upon state standards for grade 4.
5	73035	Grade 5	Code 73035 represents Grade 5 courses that are not differentiated by subject area—that is,
			instances in which students are enrolled in a grade-specified course and are taught various
			subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course
•	70000	0 1 0	content depends upon state standards for grade 5.
6	73036	Grade 6	Code 73036 represents Grade 6 courses that are not differentiated by subject area—that is,
			instances in which students are enrolled in a grade-specified course and are taught various
			subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course
7	72027	O	content depends upon state standards for grade 6.
7	73037	Grade 7	Code 73037 represents Grade 7 courses that are not differentiated by subject area—that is,
			instances in which students are enrolled in a grade-specified course and are taught various
			subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course
8	73038	Grade 8	content depends upon state standards for grade 7.
0	13030	Grade 0	Code 73038 represents Grade 8 courses that are not differentiated by subject area—that is,
			instances in which students are enrolled in a grade-specified course and are taught various
			subjects throughout the day, rather than being enrolled in subject-specific courses. Specific course
			content depends upon state standards for grade 8.

Course	Course	One was No	Ower Providence
Grade	Code	Course Name e and Literature	Course Description
_	nsive Languag		
9	01001	English/Language Arts I (9th grade)	English/Language Arts I (9th grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections.
10	01002	English/Language Arts II (10th grade)	English/Language Arts II (10th grade) courses usually offer a balanced focus on composition and literature. Typically, students learn about the alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message.
11	01003	English/Language Arts III (11th grade)	English/Language Arts III (11th grade) courses continue to develop students' writing skills, emphasizing clear, logical writing patterns, word choice, and usage, as students write essays and begin to learn the techniques of writing research papers. Students continue to read works of literature, which often form the backbone of the writing assignments. Literary conventions and stylistic devices may receive greater emphasis than in previous courses.
12	01004	English/Language Arts IV (12th grade)	English/Language Arts IV (12th grade) courses blend composition and literature into a cohesive whole as students write critical and comparative analyses of selected literature, continuing to develop their language arts skills. Typically, students primarily write multi-paragraph essays, but they may also write one or more major research papers.
	01005	AP English Language and Composition	Following the College Board's suggested curriculum designed to parallel college-level English courses, AP English Language and Composition courses expose students to prose written in a variety of periods, disciplines, and rhetorical contexts. These courses emphasize the interaction of authorial purpose, intended audience, and the subject at hand, and through them, students learn to develop stylistic flexibility as they write compositions covering a variety of subjects that are intended for various purposes.
	01006	AP English Literature and Composition	Following the College Board's suggested curriculum designed to parallel college-level English courses, AP English Literature and Composition courses enable students to develop critical standards for evaluating literature. Students study the language, character, action, and theme in works of recognized literary merit; enrich their understanding of connotation, metaphor, irony, syntax, and tone; and write compositions of their own (including literary analysis, exposition, argument, narrative, and creative writing).
	01007	IB Language A (English)	IB Language A (English) courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors and written analyses of this literature in addition to other oral and written assignments. All course content is designed to improve students' accuracy and fluency in the English language.
	01008	English as a Second Language	English as a Second Language (ESL) courses are designed for the rapid mastery of the English language, focusing on reading, writing, speaking, and listening skills. ESL courses usually begin with extensive listening and speaking practice, building on auditory and oral skills, and then move on to reading and writing. These courses provide an explanation of basic structures of the English language, enabling students to progress from an elementary understanding of English words and verb tenses to a more comprehensive grasp of various formal and informal styles and then to advance to "regular" English courses. ESL classes may also include an orientation to the customs and culture of the diverse population in the United States.
Literature/R	Reading		
	01051	English/Literature (freshmen and sophomores)	English/Literature (freshmen and sophomores) courses are designed for freshmen and/or sophomores and typically introduce them to two or more genres of literature (novel, short story, poetry, and so on). Exploration of each genre's literary elements; determination of theme and intent; and examination of vocabulary and semantics are often included in the course content. Writing assignments are required as an additional method to improve understanding and comprehension.
	01052	English/Literature (juniors and seniors)	English/Literature (juniors and seniors) courses are designed for juniors and/or seniors and emphasize comprehension, discernment, and critical-thinking skills in the reading of texts and literature. These courses introduce and explore more advanced literary techniques (irony, satire, humor, connotation, tone, rhythm, symbolism, and so on) through two or more literary genres, with the aim of creating sophisticated readers. Writing assignments are required as an additional method to develop and improve critical-thinking and analytic skills.

NCES Secondar	y Schoo	l Courses
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Course	Course		
Grade	Code	Course Name	Course Description
01 - Englis	h Language	e and Literature	
Literature/R	eading		
	01055	American Literature/History	American Literature/History courses integrate the study of American literature with an overview of U.S. history. These courses may also include other aspects of American culture, such as art or music. A two-year sequence or two-period per day class may be required to cover the same objectives as would be covered separately in U.S. History Overview and American Literature.
	01058	World Literature	World Literature courses use representative literature selections from ancient and/or modern times from countries around the world. Students improve their critical-thinking skills as they comprehend the diversity of literary traditions and the influences of those traditions. Oral discussion is an integral part of literature courses, and written compositions are often required.
	01061	Literature of a Genre	These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on one or several genres, such as poetry, essay, biography, short story, drama, and so on. Students determine the underlying assumptions and values within the selected works and also examine the structure, techniques, and intentions of the genre being studied. Oral discussion is an integral part of these genre-oriented courses, and written compositions are often required.
	01063	Literature of a Place	These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on a particular geographic region. Students determine the underlying assumptions and values within the selected works; study how the literature reflects the land, society, and history of the region; and may study the influence of this literature on others. Oral discussion is an integral part of literature courses, and written compositions are often required.
	01064	Literature of a People	These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), but use literature written by authors who share a particular characteristic such as religion, culture, or gender. Students determine the underlying assumptions and values within the selected works, reflect upon the influence of a common characteristic, and compare the points of view of various authors. Oral discussion is an integral part of literature courses, and written compositions are often required.
	01065	Literature of a Theme	These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), but use selected literature to explore a particular theme as expressed from several points of view. Such themes might include The American Dream, Society and Self, Exploration, War and Peace, and the like.
Composition	n/Writing		and con, Exploration, war and recoo, and the line.
,	01101	English/Composition (freshmen and sophomores)	English/Composition (freshmen and sophomores) courses are designed for freshmen and/or sophomores and build upon previous writing skills. These courses seek to develop the writing processes and practices necessary for producing successful high school compositions. Students typically learn to write persuasive, critical, and creative multi-paragraph essays and compositions. While emphasizing composition, these courses may also incorporate some literature study to expose students to exemplary illustrations of various forms of writing.
	01102	English/Composition (juniors and seniors)	English/Composition (juniors and seniors) courses are designed for juniors and/or seniors and build upon previous writing skills. Reinforcing the logic and critical-thinking skills that accompany good writing, these courses—which emphasize word choice, usage, and writing mechanics—provide continued and advanced instruction in writing for a variety of purposes and audiences. English/Composition (juniors and seniors) courses may emphasize college or business preparation; literature study may be offered as an additional component in which students analyze examples of several genres.
	01105	Research/Technical Writing	Research/Technical Writing classes prepare students to write research papers and/or technical reports. These classes emphasize researching (primary and secondary sources), organizing (material, thoughts, and arguments), and writing in a persuasive or technical style.
Speech and	Communica		
	01152	Forensic Speech—Inclusive	Forensic Speech—Inclusive courses offer students the opportunity to learn how to use oral skills effectively in formal and informal situations. Students learn such skills as logic and reasoning, the organization of thought and supporting materials, and effective presentation of one's voice and body. Often linked to an extracurricular program, these courses introduce students to numerous public speaking situations, and they learn the methods, aims, and styles of a variety of events (e.g., formal debate, Lincoln-Douglas debate, expository speaking, radio broadcast, oral interpretation, and dramatic interpretation). Participation in competition is encouraged, but not always required.

14020 360	Oriuary 30	chool Courses	
Course Grade	Course Code	Course Name	Course Description
		and Literature	Course Bosonphon
Speech and (
	01153	Forensic Speech—Debate	Forensic Speech—Debate courses offer students the opportunity to learn how to use oral skills in formal and informal situations. In these courses, students are able to develop such skills as logic and reasoning, research and analysis, organization of thought and supporting materials, argumentative style and skill, and effective presentation of one's voice and body. Often linked to an extracurricular program, these courses introduce students to the methods, aims, and styles used in various kinds of debates (formal debate or Lincoln-Douglas). Participation in competition is encouraged, but not always required.
	01154	Forensic Speech—Individual Event	Forensic Speech—Individual Event courses offer students the opportunity to learn how to use oral skills in formal and informal situations. Topics included depend upon the event(s) being taught, but they usually emphasize effective presentation of one's voice and body, thoughtful understanding and interpretation of literature, logic and reasoning, and the organization of thought and supporting materials. Often linked to an extracurricular program, these courses introduce students to one or several individual event categories (e.g., exposition, oral interpretation, dramatic interpretation, and radio broadcast). Participation in competition is encouraged, but not always required.
	01156	Applied English and Communications	Applied English and Communications courses teach students communication skills—reading, writing, listening, speaking—concentrating on "real-world" applications. These courses usually emphasize the practical application of communication as a business tool—using technical reports and manuals, business letters, resumes, and applications as examples—rather than emphasize language arts skills as applied to scholarly and literary materials.
Linguistics			
	01201	English Morphology and Grammar	English Morphology and Grammar courses involve the study of the English language—its roots and derivations, structure and sentence patterns, dialects, writing and spelling systems, and uses as a communication tool.
All Others			
	01995	English Language and Literature—Aide	English Language and Literature—Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.
02 - Mathen	natics		
Foundation I	Mathematics		
	02002	General Math	General Math courses reinforce and expand students' foundational math skills, such as arithmetic operations using rational numbers; area, perimeter, and volume of geometric figures, congruence and similarity, angle relationships, the Pythagorean theorem, the rectangular coordinate system, sets and logic, ratio and proportion, estimation, formulas, solving and graphing simple equations and inequalities.
Pure Mathem	natics		
	02051	Pre-Algebra	Pre-Algebra courses increase students' foundational math skills and prepare them for Algebra I by covering a variety of topics, such as properties of rational numbers (i.e., number theory), ratio, proportion, estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first-degree equations and inequalities.
	02052	Algebra I	Algebra I courses include the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.
	02053	Algebra I—Part 1	The first part in a multi-part sequence of Algebra I. This course generally covers the same topics as the first semester of Algebra I, including the study of properties of rational numbers (i.e., number theory), ratio, proportion, and estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first degree equations and inequalities.
	02054	Algebra I—Part 2	The second part in a multi-part sequence of Algebra I. This course generally covers the same topics as the second semester of Algebra I, including the study of properties of the real number system and operations, evaluating rational algebraic expressions, solving and graphing first degree equations and inequalities, translating word problems into equations, operations with and factoring of polynomials, and solving simple quadratics.
	02055	Transition Algebra	Transition Algebra courses review and extend algebra and geometry concepts for students who have already taken Algebra I and Geometry. Transition Algebra courses include a review of such topics as properties and operations of real numbers; evaluation of rational algebraic expressions; solutions and graphs of first degree equations and inequalities; translation of word problems into equations; operations with and factoring of polynomials; simple quadratics; properties of plane and solid figures; rules of congruence and similarity; coordinate geometry including lines, segments, and circles in the coordinate plane; and angle measurement in triangles including trigonometric ratios.

Course Grade	Course Code	Course Name	Course Description
02 - Mathe			· ··· p · ·
Pure Mathe	matics		
	02056	Algebra II	Algebra II course topics typically include field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and
	02057	Algebra III	operations with rational and irrational exponents. Algebra III courses review and extend algebraic concepts for students who have already taken Algebra II. Course topics include (but are not limited to) operations with rational and irrational expressions, factoring of rational expressions, linear equations and inequalities, quadratic equations, solving systems of linear and quadratic equations, properties of higher degree equations, and operations with rational and irrational exponents. The courses may introduce topics in discrete math, elementary probability and statistics; matrices and determinants; and sequences and series.
	02058	Particular Topics in Algebra	These courses examine a specific topic in algebra, such as linear equations or rational numbers, rather than provide an overview of algebra concepts.
	02061	Integrated Math—multi-year equivalent	Integrated Math courses emphasize the teaching of mathematics as problem solving, communication, and reasoning, and emphasize the connections among mathematical topics and between mathematics and other disciplines. The multi-period sequence of Integrated Math replaces the traditional Algebra I, Geometry, Algebra II sequence of courses, and usually covers the following topics during a three- or four-year sequence: algebra, functions, geometry from both a synthetic and an algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure.
	02072	Geometry	Geometry courses, emphasizing an abstract, formal approach to the study of geometry, typically include topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.
	02102	Discrete Mathematics	Discrete Mathematics courses include the study of topics such as number theory, discrete probability, set theory, symbolic logic, Boolean algebra, combinatorics, recursion, basic algebraic structures and graph theory.
	02103	Trigonometry	Trigonometry courses prepare students for eventual work in calculus and typically include the following topics: trigonometric and circular functions; their inverses and graphs; relations among the parts of a triangle; trigonometric identities and equations; solutions of right and oblique triangles; and complex numbers.
	02104	Math Analysis	Math Analysis courses include the study of polynomial, logarithmic, exponential, and rational functions and their graphs; vectors; set theory; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity. They may also include some study of trigonometry and/or pre-calculus topics.
	02110	Pre-Calculus	Pre-Calculus courses combine the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis topics as preparation for calculus. Topics typically include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity.
	02112	Linear Programming	Linear Programming courses include a study of mathematical modeling and the simplex method to solve linear inequalities and are typically intended for students who have attained pre-calculus objectives.
	02121	Calculus	Calculus courses include the study of derivatives, differentiation, integration, the definite and indefinite integral, and applications of calculus. Typically, students have previously attained knowledge of pre-calculus topics (some combination of trigonometry, elementary functions, analytic geometry, and math analysis).
	02124	AP Calculus AB	Following the College Board's suggested curriculum designed to parallel college-level calculus courses, AP Calculus AB provides students with an intuitive understanding of the concepts of calculus and experience with its methods and applications. These courses introduce calculus and include the following topics: elementary functions; properties of functions and their graphs; limits and continuity; differential calculus (including definition of the derivative, derivative formulas, theorems about derivatives, geometric applications, optimization problems, and rate-of-change problems); and integral calculus (including antiderivatives and the definite integral).

Course	Course					
Grade	Code	Course Name	Course Description			
02 - Mathematics						
Pure Mathem		AD Calaulus DC				
	02125	AP Calculus BC	Following the College Board's suggested curriculum designed to parallel college-level calculus courses, AP Calculus BC courses provide students with an intuitive understanding of the concepts of calculus and experience with its methods and applications, and also require additional knowledge of the theoretical tools of calculus. These courses assume a thorough knowledge of elementary functions, and cover all of the calculus topics in AP Calculus AB as well as the following topics: vector functions, parametric equations, and polar coordinates; rigorous definitions of finite and nonexistent limits; derivatives of vector functions and parametrically defined functions; advanced techniques of integration and advanced applications of the definite integral; and sequences and series.			
	02131	IB Mathematical Studies	IB Mathematical Studies courses prepare students to take the International Baccalaureate Mathematical Studies exam at the Subsidiary or Higher level. Intended to provide students with the skills to cope with the mathematical demands of a technological society, course topics include linear, quadratic, and exponential functions, solutions, and graphs; skills in computation, estimation, and development of algorithms; data analysis, including collection, calculation, and presentation of statistics; set operations and logic; business techniques, including progressions and linear programming; and geometry and trigonometry.			
	02132	IB Mathematics	IB Mathematics courses prepare students to take the International Baccalaureate Mathematics exams at the Subsidiary or Higher level. Topics include operations and properties of number sets; trigonometric functions, equations, and graphs; algebra and coordinate geometry; simultaneous linear equations; polynomial and quadratic functions and equations; calculus, including bilinear, exponential and logarithmic functions; two dimensional vectors and matrices; and probability.			
	02133	IB Mathematics and Computing—SL	IB Mathematics and Computing—SL courses prepare students to take the International Baccalaureate Mathematics and Computing exam at the Subsidiary level. Designed to give students a working knowledge of a high level programming language and sound mathematical training, course topics include operations and properties of number sets; trigonometric functions, equations, and graphs; algebra and coordinate geometry, including simultaneous linear equations, binomial theorem, and polynomial and quadratic functions and equations; calculus; vectors and matrices; and numerical analysis. The courses also contain components on computer problem solving and programming; topics regarding computer hardware, software, modes of operation, and data types and structures.			
	02134	IB Further Mathematics—SL	IB Further Mathematics—SL courses prepare students to take the International Baccalaureate Further Mathematics at the Subsidiary level. Designed to advance students knowledge of IB mathematics—HL, course topics include geometry; statistics and probability; sets, relations and groups; series and differential equations; and discrete mathematics.			
Applied Math	nematics					
	02151	General Applied Math	General Applied Math courses reinforce general math skills, extend these skills to include some pre-algebra and algebra topics, and use these skills in a variety of practical, consumer, business, and occupational applications. Course topics typically include rational numbers, measurement, basic statistics, ratio and proportion, basic geometry, formulas, and simple equations.			
	02153	Technical Math	Technical Math courses extend students' proficiency in mathematics, and often apply these skills to technical and/or industrial situations and problems. Technical Math topics may include but are not limited to rational numbers, systems of measurements, tolerances, numerical languages, geometry, algebra, statistics, and using tables, graphs, charts, and other data displays. Technology is integrated as appropriate.			
	02154	Business Math	Business Math courses reinforce general math skills, emphasize speed and accuracy in computations, and use these skills in a variety of business applications. Business Math courses reinforce general math topics (e.g., arithmetic, measurement, statistics, ratio and proportion, exponents, formulas, and simple equations) by applying these skills to business problems and situations; applications might include wages, hourly rates, payroll deductions, sales, receipts,			
	02156	Computer Math with Algebra	accounts payable and receivable, financial reports, discounts, and interest. Intended for students who have attained the objectives of Algebra I, Computer Math—Algebra I level courses include a study of computer systems and programming, and use the computer to solve math problems.			
Probability a	na Statistics					

Course Grade	Course Code	Course Name	Course Description
02 - Mathe	matics		·
Probability a	and Statistics	5	
	02201	Probability and Statistics	Probability and Statistics courses introduce the study of likely events and the analysis, interpretation, and presentation of quantitative data. Course topics generally include basic probability and statistics: discrete probability theory, odds and probabilities, probability trees, populations and samples, frequency tables, measures of central tendency, and presentation of data (including graphs). Course topics may also include normal distribution and measures of
	02203	AP Statistics	variability. Following the College Board's suggested curriculum designed to parallel college-level statistics courses, AP Statistics courses introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, sampling and experimentation, anticipating patterns, and statistical inference.
	02209	Probability and Statistics—Other	Other Probability and Statistics courses.
Other Mathe	ematics		
	02993	Mathematics—Test Preparation	Mathematics—Test Preparation courses provide students with activities in analytical thinking and with the skills and strategies associated with standardized test taking (such as the PSAT, SAT, and ACT). Topics covered include strategies for arithmetic, algebra, geometry, and quantitative comparison problems as well as time management, scoring procedures and calculator usage.
	02999	Mathematics—Other	Other Mathematics courses.
03 - Life ar	nd Physical	Sciences	
Earth Scien	ce		
	03001	Earth Science	Earth Science courses offer insight into the environment on earth and the earth's environment in space. While presenting the concepts and principles essential to students' understanding of the dynamics and history of the earth, these courses usually explore oceanography, geology, astronomy, meteorology, and geography.
	03002	Geology	Geology courses provide an in-depth study of the forces that formed and continue to affect the earth's surface. Earthquakes, volcanoes, and erosion are examples of topics that are presented.
	03003	Environmental Science	Environmental Science courses examine the mutual relationships between organisms and their environment. In studying the interrelationships among plants, animals, and humans, these courses usually cover the following subjects: photosynthesis, recycling and regeneration, ecosystems, population and growth studies, pollution, and consequation of natural resources.
	03004	Astronomy	population and growth studies, pollution, and conservation of natural resources. Astronomy courses offer students the opportunity to study the solar system, stars, galaxies, and interstellar bodies. These courses usually introduce and use astronomic instruments and typically explore theories regarding the origin and evolution of the universe, space, and time.
	03005	Marine Science	Courses in Marine Science focus on the content, features, and possibilities of the earth's oceans. They explore marine organisms, conditions, and ecology and sometimes cover marine mining, farming, and exploration.
	03006	Meteorology	Meteorology courses examine the properties of the earth's atmosphere. Topics usually include atmospheric layering, changing pressures, winds, water vapor, air masses, fronts, temperature changes and weather forecasting.
	03008	Earth and Space Science	Earth and Space Science courses introduce students to the study of the earth from a local and global perspective. In these courses, students typically learn about time zones, latitude and longitude, atmosphere, weather, climate, matter, and energy transfer. Advanced topics often include the study of the use of remote sensing, computer visualization, and computer modeling to enable earth scientists to understand earth as a complex and changing planet.
	03048	Earth Science—Workplace Experience	Earth Science—Workplace Experience courses provide work experience in a field related to earth science. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
Biology	0000	D: I	
	03051	Biology	Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy.
	03052	Biology—Advanced Studies	function, general plant and animal physiology, genetics, and taxonomy. Usually taken after a comprehensive initial study of biology, Biology—Advanced Studies courses cover biological systems in more detail. Topics that may be explored include cell organization, function, and reproduction; energy transformation; human anatomy and physiology; and the evolution and adaptation of organisms.

Course	Course		
Grade	Code	Course Name	Course Description
03 - Life ar	nd Physical	Sciences	
Biology	03053	Anatomy and Physiology	Usually taken after a comprehensive initial study of biology, Anatomy and Physiology courses present the human body and biological systems in more detail. In order to understand the structure
			of the human body and its functions, students learn anatomical terminology, study cells and tissues, explore functional systems (skeletal, muscular, circulatory, respiratory, digestive, reproductive, nervous, and so on), and may dissect mammals.
	03054	Anatomy	Anatomy courses present an in-depth study of the human body and biological system. Students study such topics as anatomical terminology, cells, and tissues and typically explore functional systems such as skeletal, muscular, circulatory, respiratory, digestive, reproductive, and nervous systems.
	03055	Physiology	Physiology courses examine all major systems, tissues, and muscle groups in the human body to help students understand how these systems interact and their role in maintaining homeostasis. These courses may also cover such topics as cell structure and function, metabolism, and the human life cycle.
	03056	AP Biology	Adhering to the curricula recommended by the College Board and designed to parallel collegelevel introductory biology courses, AP Biology courses stress basic facts and their synthesis into major biological concepts and themes. These courses cover three general areas: molecules and cells (including biological chemistry and energy transformation); genetics and evolution; and organisms and populations (i.e., taxonomy, plants, animals, and ecology). AP Biology courses include college-level laboratory experiments.
	03057	IB Biology	IB Biology courses prepare students to take the International Baccalaureate Biology exams at either the Subsidiary or Higher level. In keeping with the general aim of IB Experimental Sciences courses, IB Biology promotes understanding of the facts, principles, and concepts underlying the biological field; critical analysis, evaluation, and generation of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of biology and scientific advances in biology upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes study of living organisms from the cellular level through functioning entities within the biosphere. Laboratory experimentation is an essential component of these courses.
	03058	Botany	Botany courses provide students with an understanding of plants, their life cycles, and their evolutionary relationships.
	03060	Microbiology	Microbiology courses provide students with a general understanding of microbes, prokaryotic and euaryotic cells, and the three domain systems. Additional topics covered may include bacterial control, cell structure, fungi, protozoa, viruses and immunity, microbial genetics, and metabolism.
	03061	Zoology	Zoology courses provide students with an understanding of animals, the niche they occupy in their environment or habitat, their life cycles, and their evolutionary relationships to other organisms. These courses should also help students develop an awareness and understanding of biotic communities.
	03062	Conceptual Biology	These courses provide students with a basic understanding of living things. Topics covered may include ecology and environmental problems such as overpopulation and pollution as well as cells, types of organisms, evolutionary behavior, and inheritance.
	03098	Biology—Workplace Experience	Biology—Workplace Experience courses provide work experience in a field related to biology. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
Chemistry	03102	Chemistry—Advanced Studies	Usually taken after a comprehensive initial study of chemistry, Chemistry—Advanced Studies courses cover chemical properties and interactions in more detail. Advanced chemistry topics include organic chemistry, thermodynamics, electrochemistry, macromolecules, kinetic theory, and
	03103	Organic Chemistry	nuclear chemistry. Organic Chemistry courses involve the study of organic molecules and functional groups. Topics covered may include nomenclature, bonding molecular structure and reactivity, reaction mechanisms, and current spectroscopic techniques.
	03104	Physical Chemistry	Usually taken after completing a calculus course, Physical Chemistry courses cover chemical kinetics, quantum mechanics, molecular structure, molecular spectroscopy, and statistical mechanics.
	03105	Conceptual Chemistry	Conceptual Chemistry courses are practical, nonquantitative chemistry courses designed for students who desire an understanding of chemical concepts and applications.

Course	Code	Cauras Nama	Cauras Bassintian
Grade 03 - Life ar	Code nd Physical	Course Name Sciences	Course Description
Chemistry	iu Filysicai	Sciences	
onemistry	03106	AP Chemistry	Following the curricula recommended by the College Board, AP Chemistry courses usually follow high school chemistry and second-year algebra. Topics covered may include atomic theory and structure; chemical bonding; nuclear chemistry; states of matter; and reactions (stoichiometry, equilibrium, kinetics, and thermodynamics). AP Chemistry laboratories are equivalent to those of typical college courses.
	03107	IB Chemistry	IB Chemistry courses prepare students to take the International Baccalaureate Chemistry exams at either the Subsidiary or Higher level. In keeping with the general aim of IB Experimental Sciences courses, IB Chemistry promotes understanding of the facts, patterns, and principles underlying the field of chemistry; critical analysis, evaluation, prediction, and generation of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of chemistry and scientific advances in chemistry upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes the study of the materials of the environment, their properties, and their interaction. Laboratory experimentation is an essential part of these courses.
Physics	02450	Dhusias Advanced Chidias	
	03152	Physics—Advanced Studies	Usually taken after a comprehensive initial study of physics, Physics—Advanced Studies courses provide instruction in laws of conservation, thermodynamics, and kinetics; wave and particle phenomena; electromagnetic fields; and fluid dynamics.
	03155	AP Physics B	AP Physics B courses are designed by the College Board to parallel college-level physics courses that provide a systematic introduction to the main principles of physics and emphasize problemsolving without calculus. Course content includes mechanics, electricity and magnetism, modern physics, waves and optics, and kinetic theory and thermodynamics.
	03156	AP Physics C	Designed by the College Board to parallel college-level physics courses that serve as a partial foundation for science or engineering majors, AP Physics C courses primarily focus on 1) mechanics and 2) electricity and magnetism, with approximately equal emphasis on these two areas. AP Physics C courses are more intensive and analytical than AP Physics B courses and
	03157	IB Physics	require the use of calculus to solve the problems posed. IB Physics courses prepare students to take the International Baccalaureate Physics exams at either the Subsidiary or Higher level. In keeping with the general aim of IB Experimental Sciences courses, IB Physics promotes understanding of the facts, patterns, and principles underlying the field of physics; critical analysis, prediction, and application of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of scientific advances in physics upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes the study of the fundamental laws of nature and the interaction between concepts of matter, fields, waves, and energy. Laboratory experimentation is essential; calculus may be used in some courses.
	03159	Physical Science	Physical Science courses involve study of the structures and states of matter. Typically (but not always) offered as introductory survey courses, they may include such topics as forms of energy, wave phenomenon, electromagnetism, and physical and chemical interactions.
	03160	IB Physical Science	IB Physical Science courses prepare students to take the International Baccalaureate Physical Science exams at either the Subsidiary or Higher level. These courses integrate the study of physics and chemistry, showing how the physical and chemical properties of materials can be explained and predicted in terms of atomic, molecular, and crystal structures and forces. In keeping with the general aim of IB Experimental Sciences courses, IB Physical Science courses promote critical analysis, prediction, and application of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of science and scientific advances upon both society and issues of ethical, philosophical, and political importance. Students are required to develop and pursue an individual, experimental project, which is evaluated as part of the IB exam.
	03161	Conceptual Physics	Conceptual Physics courses introduce students to the use of chemicals, characteristic properties of materials, and simple mechanics to better describe the world and nonliving matter. The courses emphasize precise measurements and descriptive analysis of experimental results. Topics covered may include energy and motion, electricity, magnetism, heat, the structure of matter, and how matter reacts to materials and forces.
	03198	Physics—Workplace Experience	Physics—Workplace Experience courses provide work experience in a field related to physics. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further
			study of the field or discussion regarding experiences that students encounter in the workplace.

NCES	Secondary	School	Courses

Course Grade	Course Code	Course Name	Course Description
	nd Physical	Course Name Sciences	Course Description
Integrated/0	-	Colonicos	
	03203	Applied Biology/Chemistry	Applied Biology/Chemistry courses integrate biology and chemistry into a unified domain of study and present the resulting body of knowledge in the context of work, home, society, and the environment, emphasizing field and laboratory activities. Topics include natural resources, water, air and other gases, nutrition, disease and wellness, plant growth and reproduction, life processes,
	03206	IB Design Technology	microorganisms, synthetic materials, waste and waste management, and the community of life. IB Design Technology courses prepare students to take the International Baccalaureate Design Technology exams at either the Subsidiary or Higher level. In keeping with the general aim of IB Experimental Sciences courses, IB Design Technology courses promote understanding and use of the scientific method to solve problems using scientific information and production techniques. Practical/investigative work centers on the properties of materials, mechanisms, control circuits,
	03207	AP Environmental Science	and production techniques as they apply to constructing an artifact or developing skills and ideas useful in carrying out such a project. AP Environmental Science courses are designed by the College Board to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, identify and analyze environmental problems (both natural and human made), evaluate the relative risks associated with the problems, and examine alternative solutions for resolving and/or preventing them. Topics covered include science as a process, ecological
	03208	IB Environmental Science	processes and energy conversions, earth as an interconnected system, the impact of humans on natural systems, cultural and societal contexts of environmental problems, and the development of practices that will ensure sustainable systems. IB Environmental Systems courses prepare students to take the International Baccalaureate Environmental Systems exam at the Standard level by providing them with the knowledge, methods, and techniques to understand the nature and functioning of natural systems, the relationships that affect environmental equilibrium, and human impact on the biosphere. Topics also include ecosystem integrity and sustainability, students' own relationships to the environment, and the
	03209	Aerospace	nature of internationalism in resolving major environmental issues. Aerospace courses explore the connection between meteorology, astronomy, and flight across and around the earth as well as into outer space. In addition to principles of meteorology (e.g., atmosphere, pressures, winds and jet streams) and astronomical concepts (e.g., solar system, stars, and interplanetary bodies), course topics typically include the history of aviation, principles of
	03210	Science, Technology and Society	aeronautical decision-making, airplane systems, aerodynamics, and flight theory. Science, Technology, and Society courses encourage students to explore and understand the ways in which science and technology shape culture, values, and institutions and how such factors, in turn, shape science and technology. Topics covered may include how science and
	03212	Scientific Research and Design	technology enter society and how they change as a result of social processes. In Scientific Research and Design courses, students conceive of, design, and complete a project using scientific inquiry and experimentation methodologies. Emphasis is typically placed on safety issues, research protocols, controlling or manipulating variables, data analysis, and a coherent display of the project and its outcome(s).
	03998	Life and Physical Sciences—Workplace Experience	Life and Physical Sciences—Workplace Experience courses provide work experience in a field related to life and/or physical science. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
04 - Social	l Sciences a	nd History	·
Geography	04001	World Geography	World Geography courses provide students with an overview of world geography, but may vary widely in the topics they cover. Topics typically include the physical environment; the political
	04003	IB Geography	landscape; the relationship between people and the land; economic production and development; and the movement of people, goods, and ideas. IB Geography courses prepare students to take the International Baccalaureate Geography exams at either the Subsidiary or Higher level, and individual courses vary to reflect the different emphases of the exams (either human or physical geology and case study or fieldwork instruction). In general, however, IB Geography courses aim to help students understand the relationships within society, the relationships between society and the natural environment, and
	04049	Geography—Other	how those relationships change over time. Other Geography courses.
World Histo	ory		

NC	CES	Second	lary	School	Cour	ses
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Course	Course		
Grade	Code	Course Name	Course Description
04 - Social S	Sciences ar	nd History	
World History	y 04051	World History—Overview	World History—Overview courses provide students with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments. World History—Overview courses may
	04052	World History and Geography	include geographical studies, but often these components are not as explicitly taught as geography. In addition to covering the objectives of World History—Overview courses, World History and Geography courses provide an overview of world geography. These courses are often developed in response to increased national concern regarding the importance of geography, and they
	04053	Modern World History	explore geographical concepts. Modern World History courses provide an overview of the history of human society in the past few centuries—from the Renaissance period, or later, to the contemporary period—exploring political, economic, social, religious, military, scientific, and cultural developments.
	04054	IB History	IB History courses prepare students to take the International Baccalaureate History exams at either the Subsidiary or Higher level. In these courses, students study political, military, economic, social, and cultural trends and explore the nature of historical documentation and the methods used by historians. IB History courses survey 20th-century topics in an international context; provide a detailed regional study of a major area (Africa, Europe, the Americas, West and South Asia, East and Southeast Asia, or Australia); and enable students to undertake individual study on a subject of interest in greater detail and depth.
	04056	AP European History	Following the College Board's suggested curriculum designed to parallel college-level European History courses, AP European History courses examine European civilization from the High Renaissance period to the recent past and also expose students to the factual narrative. In addition, these courses help students develop an understanding of some of the principal themes in modern European history and the abilities to analyze historical evidence and to express that understanding and analysis in writing.
	04057	AP World History	Following the College Board's suggested curriculum designed to parallel college-level World History courses, AP World History courses examine world history from 8000 BCE to the present with the aim of helping students develop a greater understanding of the evolution of global processes and contracts and how different human societies have interacted. These courses highlight the nature of changes in an international context and explore their causes and continuity.
	04063	Western Civilization	Western Civilization courses apply an interdisciplinary approach to the study of western cultural traditions, frequently using a chronological framework. Course content typically includes a survey of the major developments in and contributors to art and architecture, literature, religion and
	04066	IB Islamic History	philosophy, and culture. These courses may also cover intellectual and political movements. IB Islamic History courses prepare students to take the International Baccalaureate History exams at either the Subsidiary or Higher level. These courses are designed to provide students with the means to acquire a deep and open understanding of Islamic history and to grasp its contribution to the history of the world. Possible topics covered include political, social, economic, and intellectual aspects of Islamic history.
U.S. History	04099	World History—Other	Other World History courses.
o.o. mstory	04102	Early U.S. History	Early U.S. History courses examine the history of the United States from the colonial period to the Civil War or Reconstruction era (some courses end after this period). Some courses include American history before European settlement, while others may begin at the formation of the new nation. These courses typically include a historical overview of political, military, scientific, and social developments.
	04103	Modern U.S. History	Modern U.S. History courses examine the history of the United States from the Civil War or Reconstruction era (some courses begin at a later period) through the present time. These courses typically include a historical review of political, military, scientific, and social developments.
	04104	AP U.S. History	Following the College Board's suggested curriculum designed to parallel college-level U.S. History courses, AP U.S. History courses provide students with the analytical skills and factual knowledge necessary to address critically problems and materials in U.S. history. Students learn to assess historical materials and to weigh the evidence and interpretations presented in historical scholarship. The course examines the discovery and settlement of the New World through the recent past.
	04105	State-Specific Studies	State-Specific Studies courses examine the history, politics, economics, society, and/or cultures of one state in the United States. This course may focus primarily on the history of that state or may take an interdisciplinary approach to the contemporary issues affecting it.

Course	Course		
Grade	Code	Course Name	Course Description
	Sciences a	ind History	
J.S. History	04108	U.S. Gender Studies	U.S. Gender Studies courses examine the history, politics, economics, and/or culture of gender in U.S. society. These courses may focus primarily on gender relations or may take a more comprehensive approach to studying the contemporary issues related to gender.
	04109	Particular Topics in U.S. History	These courses examine a particular topic in U.S. History, such as particular time periods in the history of the United States, or they may focus on the history of particular U.S. regions rather than provide an overview of the subject.
overnmen	t, Politics, an	nd Law	
	04153	Political Science	Political Science courses approach the study of politics from a theoretical perspective, including an examination of the role of government and the nature of political behavior, political power, and political action.
	04155	International Relations	International Relations courses provide students with an introduction to the relationships that exist among nations, including an examination of the modern state; the foreign policies of nations; the dynamics of nationalism, ideology, and culture; and the role of international organizations. The courses may also emphasize contemporary events.
	04156	United States and World Affairs	United States and World Affairs courses provide a study of global interrelationships. Topics covered may include geographic, political, economic, and social issues of a particular country or region, with an emphasis on how these issues influence (or are influenced by) the way in which the United States relates to other countries in an interdependent world context.
	04157	AP U.S. Government and Politics	Following the College Board's suggested curriculum designed to parallel college-level U.S. Government and Politics courses, these courses provide students with an analytical perspective on government and politics in the United States, involving both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. The courses generally cover the constitutional underpinnings of the U.S. government, political beliefs and behaviors, political parties and interest groups, the institutions and policy process of national government, and civil rights and liberties.
	04158	AP Comparative Government and Politics	Following the College Board's suggested curriculum designed to parallel college-level Comparative Government and Politics courses, these courses offer students an understanding of the world's diverse political structures and practices. The courses encompass the study of both specific countries and general concepts used to interpret the key political relationships found in virtually all national policies. Course content generally includes sources of public authority and political power, the relationship between states and society, the relationships between the political and institutional
	04159	AP Government	frameworks of citizens and states, political change, and comparative methods. AP Government courses prepare students for the AP exams in both U.S. Government and Politics and Comparative Government and Politics. Course content includes the topics covered in those two
	04161	Civics	separate courses as described above. Civics courses examine the general structure and functions of American systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system. These courses do not typically delve into the same degree of detail on constitutional principles or the role of political parties and interest groups as do
	04162	Law Studies	comprehensive courses in U.S. Government. Law Studies courses examine the history and philosophy of law as part of U.S. society and include the study of the major substantive areas of both criminal and civil law, such as constitutional rights, torts, contracts, property, criminal law, family law, and equity. Although these courses emphasize
	04163	Consumer Law	the study of law, they may also cover the workings of the legal system. Consumer Law courses present a history and philosophy of law and the legal system in the United States, with a particular emphasis on those topics affecting students as consumers and young adults (such as contractual laws, laws pertaining to housing and marriage, and constitutional
	04164	Business Law	rights). Business Law courses present a history and philosophy of law and the legal system in the United States, with a particular emphasis on those topics affecting students as future business leaders and employees. Such topics may include contracts, commercial paper and debt instruments,
	04166	Particular Topics in Law	property rights, employer/employee relationships, and constitutional rights and responsibilities. These courses examine a particular topic in law such as the Constitution, specific statutes, or the legal process rather than provide an overview.
Economic-	04199	Government, Politics and Law—Other	Other Government, Politics and Law courses.
Economics			

Course Grade	Course Code	Course Name	Course Description
04 - Social	Sciences a		
Economics			
	04201	Economics	Economics courses provide students with an overview of economics with primary emphasis on the principles of microeconomics and the U.S. economic system. These courses may also cover topics such as principles of macroeconomics, international economics, and comparative economics. Economic principles may be presented in formal theoretical contexts, applied contexts, or both.
	04202	Comparative Economics	Comparative Economics courses offer students an opportunity to study different economies and economic systems, including an examination of various approaches to problems in micro- and macroeconomics.
	04205	AP Economics	AP Economics courses prepare students for the College Board's examinations in both Microeconomics and Macroeconomics; these courses include the content of the two separate courses as described above.
	04206	IB Economics	IB Economics courses prepare students to take the International Baccalaureate Economics exams at either the Subsidiary or Higher level. The courses provide students with the basic tools of economic reasoning and teach them to use those tools to explain or interpret economic problems. Course content includes resource allocation under various systems, national income analysis, international economics, and economic development and growth and may also cover income distribution.
	04249	Economics—Other	Other Economics courses.
Social Scier	nces		
	04251	Anthropology	Anthropology courses introduce students to the study of human evolution with regard to the origin, distribution, physical attributes, environment, and culture of human beings. These courses provide an overview of anthropology, including but not limited to both physical and cultural anthropology.
	04253	IB Social Anthropology	IB Social Anthropology courses prepare students to take the International Baccalaureate Social Anthropology exams at either the Subsidiary or Higher level. The courses aim to promote students' awareness of underlying patterns and causes of social relationships and systems, preconceptions and assumptions within the social environment, and the use of ethnographic data in creating models, drawing inferences, and making comparisons.
	04254	Psychology	Psychology courses introduce students to the study of individual human behavior. Course content typically includes (but is not limited to) an overview of the field of psychology, topics in human growth and development, personality and behavior, and abnormal psychology.
	04256	AP Psychology	Following the College Board's suggested curriculum designed to parallel a college-level psychology course, AP Psychology courses introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals, expose students to each major subfield within psychology, and enable students to examine the methods that psychologists use in their science and practice.
	04257	IB Psychology	IB Psychology courses prepare students to take the International Baccalaureate Psychology exams at either the Subsidiary or Higher level. Course content includes developmental and social psychology, cognition and learning, and personality subject areas, which are approached from biological/physiological, behavioral, and humanistic points of view. These courses may include a study of research design and statistics and involve practical work in psychological research.
	04258	Sociology	Sociology courses introduce students to the study of human behavior in society. These courses provide an overview of sociology, generally including (but not limited to) topics such as social institutions and norms, socialization and social change, and the relationships among individuals and groups in society.
	04260	Social Science	Social Science courses provide students with an introduction to the various disciplines in the social sciences, including anthropology, economics, geography, history, political science, psychology, and sociology. Typically, these courses emphasize the methodologies of the social sciences and the differences among the various disciplines.
umanities	04262	IB Organization Studies	IB Organization Studies courses prepare students to take the International Baccalaureate Organization Studies exams at either the Subsidiary or Higher levels. These IB courses provide a broad introduction to the principles and practices of enterprises engaged in producing, distributing, and exchanging goods and services in a variety of economic frameworks. A sample of topics explored within these courses include management styles and structures; decision-making methods; and methods for accounting, planning, and communication.
ramaniue s	04301	Humanities Survey	Humanities Survey courses provide an overview of major expressions of the cultural heritage of selected western and eastern civilizations. Content typically includes (but is not limited to) the examination of selected examples of art, music, literature, architecture, technology, philosophy, and religion of the cultures studied. These courses may also cover the languages and political institutions of these cultures.

Course	Course	O Nove	O como Para della co
Grade	Code Sciences a	Course Name	Course Description
lumanities		na mstory	
iumumues	04302	Humanities	Humanities courses examine and evoke student responses to human creative efforts and the world in particular historical periods and in particular cultures. Course content includes exploration, analysis, synthesis, and various responses to cultural traditions, including viewing, listening, speaking, reading, writing, performing, and creating. The courses may also examine relationships
	04304	IB Theory of knowledge	among painting, sculpture, architecture, and music. Obligatory for every International Baccalaureate degree candidate, IB Theory of knowledge courses aim to stimulate critical self-reflection of students' knowledge and experiences. Course content generates questions regarding the bases of knowledge and their verification in the disciplines of mathematics, natural sciences, human sciences, and history, with an awareness of moral, political, and aesthetic judgments and biases. Students learn to appreciate the strengths and limitations of various kinds of knowledge; to relate studied subjects to one another, general knowledge, and living experiences; to formulate rational arguments; and to evaluate the role of
	04305	Social Studies	language in knowledge and as a way to convey knowledge. Social Studies courses enable students to study a group of related subjects addressing the elements and structures of human society that may include economics, geography, history,
	04309	IB Philosophy	citizenship, and other social studies-related disciplines. IB Philosophy courses prepare students to take the International Baccalaureate Philosophy exams at either the Subsidiary or Higher levels. These courses challenge students to reflect upon and question the bases of knowledge and experience, to develop a personal mode of thought, to formulate rational arguments, and to use language to examine several conceptual themes in a
	04349	Humanities—Other	thoughtful, philosophical manner. Other Humanities courses.
5 - Fine a	nd Performi	ing Arts	
)rama	05055	Drama—Acting/Performance	Drama Asting/Derformance courses are intended to promote students' superiones and skill
	00000	Statute Moting/Ferrormance	Drama—Acting/Performance courses are intended to promote students' experience and skill development in one or more aspects of theatrical production, but they concentrate on acting and performance skills. Initial courses are usually introductory in nature, while the more advanced courses focus on improving technique, expanding students' exposure to different types of theatrical techniques and traditions, and increasing their chances of participating in public productions.
	05056	Drama—Stagecraft	Drama—Stagecraft courses are intended to help students develop experience and skill in one or more aspects of theatrical production, but concentrate on stagecraft (such as lighting, costuming, set construction, makeup, stage management, and so on). Initial courses are usually introductory in nature, while more advanced courses concentrate on improving technique, expanding students' exposure to different types of theatrical techniques and traditions and increasing their chances of participating in public productions. These courses may also provide a discussion of career opportunities in the theater.
lusic	05101	General Band	General Band courses develop students' technique for playing brass, woodwind, and percussion instruments and cover a variety of nonspecified band literature styles (concert, marching,
	05103	Marching Band	orchestral, and modern styles). Courses in Marching Band are intended to develop students' technique for playing brass, woodwind, and percussion instruments and cover appropriate band literature styles, primarily for
	05104	Orchestra	marching performances. Orchestra courses are designed to develop students' abilities to play brass, woodwind,
	05107	Piano	percussion, and string instruments, covering a variety of string and orchestral literature styles. Piano courses introduce students to the fundamentals of music and basic keyboard techniques such as scales, chords, and melodic lines. These courses may also include more advanced techniques.
	05108	Guitar	keyboard techniques. Guitar courses introduce students to the fundamentals of music and guitar-playing techniques, such as strumming and chords. These courses may also include more advanced guitar-playing
	05110	Chorus	techniques. Chorus courses provide the opportunity to sing a variety of choral literature styles for men's and/or
	05113	Music Theory	women's voices and are designed to develop vocal techniques and the ability to sing parts. Music Theory courses provide students with an understanding of the fundamentals of music and include one or more of the following topics: composition, arrangement, analysis, aural development, and sight reading.

Course	Course		
Grade	Code	Course Name	Course Description
	nd Performi	ing Arts	
Music	05114	AP Music Theory	AP Music Theory courses are designed to be the equivalent of a first-year music theory college course as specified by the College Board. AP Music Theory develops students' understanding of musical structure and compositional procedures. Usually intended for students who already possess performance-level skills, AP Music Theory courses extend and build upon students' knowledge of intervals, scales, chords, metric/rhythmic patterns, and the ways they interact in a composition. Musical notation, analysis, composition, and aural skills are important components of the course.
	05115	IB Music	IB Music courses prepare students to take the International Baccalaureate Music exam at either the Subsidiary or Higher level. IB Music courses develop students' knowledge and understanding of music through training in musical skills (listening, performing, and composing); exposure to music theory; and formulation of an historic and global awareness of musical forms and styles. Historical, theoretical, and practical studies are suggested by the IB Curriculum Board.
Viewel Auto	05117	Music History	Similar in nature to Music History/Appreciation courses, Music History courses focus specifically on the history of music.
Visual Arts	05153	AP Art—History of Art	Designed to parallel college-level Art History courses, AP Art—History of Art courses provide the opportunity for students to critically examine architecture, sculpture, painting, and other art forms within their historical and cultural contexts. In covering the art of several centuries (not necessarily in chronological order), students learn to identify different styles, techniques, and influences and to formulate and articulate their reactions to various kinds of artwork.
	05160	Printmaking/Graphics	Printmaking/Graphics courses cover the same topics as Creative Art—Comprehensive courses, but focus on design principles, printmaking, and graphic design.
	05161	Printmaking	Printmaking courses introduce students to a variety of printmaking techniques using processes such as relief printing (monoprint, collograph block); intaglio (etching and engraving); and perigraphy (silkscreen films, stencils, block-out). These courses emphasize design elements and principles and introduce art criticism as applied to fine art prints. Lessons may also include the historical development of printmaking in Western and non-Western cultures.
	05162	Graphic Design	Graphic Design courses emphasize design elements and principles in the purposeful arrangement of images and text to communicate a message. They focus on creating art products such as advertisements, product designs, and identity symbols. Graphic Design courses may investigate the computer's influence on and role in creating contemporary designs and provide a cultural and
	05166	Jewelry	historical study of master design works of different periods and styles. Jewelry courses apply art and design principles to the creation of jewelry. Typically, students explore using various media, such as ceramic, papier-mache, glass, plastic, copper-enameled, brass, and silver. Course topics include exposure to jewelry of diverse world cultures and the history of jewelry design. Some Jewelry courses may concentrate on metalwork processes such as brazing, soldering, casting, welding, riveting, and finishing as they relate to the creation of investor.
	05167	Photography	pewelry. Photography courses expose students to the materials, processes, and artistic techniques of taking artistic photographs. Students learn about the operation of a camera, composition, lighting techniques, depth of field, filters, camera angles, and film development. The course may cover black-and-white photography, color photography, or both. As students advance, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic style. These courses may also cover major photographers, art movements, and styles.
	05171	AP Studio Art—General Portfolio	Designed for students with a serious interest in art, AP Studio Art—General Portfolio courses enable students to refine their skills and create artistic works to be submitted to the College Board for evaluation. Given the nature of the AP evaluation, the courses typically emphasize quality of work, attention to and exploration of a particular visual interest or problem, and breadth of experience in the formal, technical, and expressive aspects of the student's art. AP Studio Art—General Portfolio evaluations require submission of artwork exemplifying talent in drawing, color organization, design, and sculpture.
	05172	AP Studio Art—Drawing Portfolio	Designed for students with a serious interest in art, AP Studio Art—Drawing Portfolio courses enable students to refine their skill and create artistic works to be submitted to the College Board for evaluation. Given the nature of the AP evaluation, the courses typically emphasize quality of work, attention to and exploration of a particular visual interest or problem, and breadth of experience in the formal, technical, and expressive aspects of drawing. In these courses, students explore representation, abstraction, and experimentation with a variety of drawing materials.

		chool Courses	
Course	Course		
rade 	Code	Course Name	Course Description
	nd Performi	ing Arts	
sual Arts			
	05173	IB Art/Design	IB Art/Design courses prepare students to take the International Baccalaureate Art/Design exams at either the Subsidiary or Higher level. IB Art/Design courses help develop students' aesthetic and creative faculties, offer training in awareness and criticism of art, and enable students to create quality works of art of their own. Students perform both studio and research work; the research component is designed to investigate particular topics or concepts of interest in further detail.
II Others	05999	Fine and Performing Art—Other	Other Fine and Performing Art courses.
6 - Foreia	n I anguage	e and Literature	
_		and Enterature	
omance La	06101	Spanish I	Decimand to introduce students to Chanish language and sulture. Chanish Laguages amphasize
	00101	Spanish I	Designed to introduce students to Spanish language and culture, Spanish I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Spanish culture is introduced through the art, literature, customs, and history of Spanish-speaking people.
	06102	Spanish II	Spanish II courses build upon skills developed in Spanish I, extending students' ability to understand and express themselves in Spanish and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s).
	06103	Spanish III	Spanish III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.
	06104	Spanish IV	Spanish IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Spanish language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.
	06110	IB Language A	IB Language A (non-English)—Spanish courses prepare students to take the International
		(non-English)—Spanish	Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve
	06111	IB Language B—Spanish	students' accuracy and fluency in the language, which is usually the students' native tongue. IB Language B—Spanish courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to
	06112	AP Spanish Language	understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed. Designed by the College Board to parallel third-year college-level courses in Spanish Composition and Conversation, AP Spanish Language courses build upon prior knowledge and develop students' ability to understand others and express themselves (in Spanish) accurately, coherently, and fluently in both formal and informal situations. Students will develop a vocabulary large enough to understand literary texts, magazine/newspaper articles, films and television productions, and so
	06113	AP Spanish Literature	on. Designed by the College Board to parallel college-level Introduction to Hispanic Literature courses, AP Spanish Literature courses cover representative works from the literatures of Spain and Spanish America, encompassing all genres. The courses build students' Spanish language proficiency so that they are able to read and understand moderately difficult prose and express
	06121	French I	critical opinions and literary analyses in oral and written Spanish (an ability equivalent to having completed a third-year college-level Spanish Language course). Designed to introduce students to French language and culture, French I emphasizes basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. French culture is introduced through the art, literature, customs, and history of the French-speaking people.

Course	Course		
Grade	Code	Course Name	Course Description
_		e and Literature	
Romance La	06122	French II	French II courses build upon skills developed in French I, extending students' ability to understand and express themselves in French and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of
	06123	French III	French-speaking people to deepen their understanding of the culture(s). French III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.
	06124	French IV	French IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the French language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate
	06130	IB Language A (non-English)—French	a good understanding of grammar and a strong vocabulary. IB Language A (non-English)—French courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.
	06131	IB Language B—French	IB Language B—French courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.
	06132	AP French Language	Designed to parallel third-year college-level courses in French Composition and Conversation, AP French Language courses build upon prior knowledge and develop students' ability to understand others and express themselves (in French) accurately, coherently, and fluently. Students will develop a vocabulary large enough to understand literary texts, magazine/newspaper articles, films and television productions, and so on.
	06133	AP French Literature	Designed to parallel college-level Introduction to French Literature courses (offered at a thirdyear level), AP French Literature courses cover representative works of French literature and build students' French language proficiency so that they are able to read and understand moderately difficult prose and express critical opinions and analyses in correct oral and written French. The study of literary components (such as character, theme, structure, imagery, style, tone, and so on) is an important focus of AP French Literature.
	06141	Italian I	Designed to introduce students to Italian language and culture, Italian I emphasizes basic grammar and syntax, simple vocabulary and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Italian culture is introduced through the art, literature, customs, and
	06142	Italian II	history of the Italian-speaking people. Italian II courses build upon skills developed in Italian I, extending students' ability to understand and express themselves in Italian and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Italian-speaking people to deepen their understanding of the culture(s).
	06143	Italian III	Italian III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.
	06150	IB Language A (non-English)—Italian	IB Language A (non-English)—Italian courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

Course	Course		
Grade	Code	Course Name	Course Description
06 - Foreig	n Language	and Literature	
Romance La			
	06151	IB Language B—Italian	IB Language B—Italian courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.
	06161	Portuguese I	Designed to introduce students to Portuguese language and culture, Portuguese I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Portuguese culture is introduced through the art, literature, customs, and history of the Portuguese-speaking people.
	06170	IB Language A	IB Language A (non-English)—Portuguese courses prepare students to take the International
		(non-English)—Portuguese	Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.
	06171	IB Language B—Portuguese	IB Language B—Portuguese courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.
ermanic La	anguages		
	06201	German I	Designed to introduce students to German language and culture, German I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. German culture is introduced through the art, literature, customs, and history of the German-speaking people.
	06202	German II	German II courses build upon skills developed in German I, extending students' ability to understand and express themselves in German and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of
	06203	German III	German-speaking people to deepen their understanding of the culture(s). German III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within
	06204	German IV	limited situations. German IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the German language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.
	06210	IB Language A (non-English)—German	IB Language A (non-English)—German courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.
	06211	IB Language B—German	IB Language B—German courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.

NCES Secondary	School	Courses
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Course	Course		
Grade	Code	Course Name	Course Description
06 - Foreig	ın Language	e and Literature	
Germanic L	anguages 06212	AP German Language	Designed to parallel third-year college-level courses in German Language, AP German Language courses build upon prior knowledge and develop students' ability to understand spoken German in various conversational situations, to express themselves (in German) accurately and fluently, and to have a command of the structure of the German language. Students will develop a vocabulary large enough to understand literature, magazine/newspaper articles, films and television productions, and so on.
lassical La	anguages		
	06301	Latin I	Latin I courses expose students to the Latin language and culture, emphasizing basic grammar and syntax, simple vocabulary, and the influence of Latin on current English words. Students will be able to read and write in Latin on a basic level.
	06302	Latin II	Latin II courses enable students to expand upon what they have learned in Latin I, increasing their skills and depth of knowledge through the practice of structures, forms, and vocabulary. Reading materials reflect Roman life and culture.
	06303	Latin III	Latin III courses build students' knowledge of the Latin language and culture, typically focusing on having students express increasingly complex concepts in writing and comprehend and react to original Latin texts.
	06304	Latin IV	Latin IV courses build students' knowledge of the Latin language and culture, typically focusing on having students express increasingly complex concepts in writing and comprehend and react to original Latin texts.
	06311	IB Classical Languages—Latin	Latin V courses build students' knowledge of the Latin language and culture, typically focusing on having students express increasingly complex concepts in writing and comprehend and react to original Latin texts.
	06313	AP Latin (Virgil, Catullus and Horace)	Designed to parallel advanced college-level courses in Latin studies, AP Latin courses build upon and increase knowledge of Latin, enabling students to read the language with comprehension, to accurately translate Latin into English, and to appreciate the stylistic literary techniques used by the authors. AP Latin courses also include study of the political, social, and cultural background of the literary works and their authors, as well as their influence on later literature.
	06359	Classical Languages—Other	Other Classical Language courses.
East Asian I	Languages		
	06401	Chinese I	Designed to introduce students to Chinese language and culture, Chinese I courses emphasize basic syntax, simple vocabulary, written characters, and spoken tones so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Chinese culture is introduced through the art, literature, customs, and history of Chinese-speaking people.
	06402	Chinese II	Chinese II courses build upon skills developed in Chinese I, extending students' ability to understand and express themselves in Chinese and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and phrasing, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Chinese-speaking
	06403	Chinese III	people to deepen their understanding of the culture(s). Chinese III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.
	06404	Chinese IV	Chinese IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the Chinese language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of language rules and a strong vocabulary.
	06410	IB Language A (non-English)—Chinese	IB Language A (non-English)—Chinese courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.

Course	Course	O Name	Occurs Boundation
Grade 06 - Foreign	Code	Course Name and Literature	Course Description
uo - Foreigii East Asian La		and Literature	
Last Asian Le	06411	IB Language B—Chinese	IB Language B—Chinese courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to
	06421	Japanese I	communicate fluently at native speed. Designed to introduce students to Japanese language and culture, Japanese I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Japanese culture is introduced through the art, literature, customs, and history of the Japanese-speaking people.
	06430	IB Language A (non-English)—Japanese	IB Language A (non-English)—Japanese courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve
	06431	IB Language B—Japanese	students' accuracy and fluency in the language, which is usually the students' native tongue. IB Language B—Japanese courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.
Balto-Slavic I	Languages		osimiamodo nomi, a nadro opodi
	06601	Russian I	Designed to introduce students to Russian language and culture, Russian I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Russian culture is introduced through the art, literature, customs, and history of the Russian-speaking people.
	06610	IB Language A (non-English)—Russian	IB Language A (non-English)—Russian courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes indepth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.
	06611	IB Language—Russian	IB Language B—Russian courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.
American Sig	ın Language		communicate nucliny at harve speed.
	06801	American Sign Language I	Designed to introduce students to American Sign Language, American Sign Language I courses enable students to communicate with deaf persons through finger spelling, signed words, and gestures. Course topics may include the culture of and issues facing deaf people.
	06802	American Sign Language II	American Sign Language II courses build upon skills developed in American Sign Language I, extending students' ability to understand and express themselves in American Sign Language and increasing their vocabulary and speed. Typically, students learn how to engage in discourse for
	06803	American Sign Language III	informative or social purposes and to comprehend the language when signed slowly. American Sign Language III courses focus on having students express increasingly complex concepts while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when viewing the language signed at normal rates
	06804	American Sign Language IV	and conversing easily within limited situations. American Sign Language IV courses focus on advancing students' skills and abilities to sign and understand the language so that they can maintain simple conversations with sufficient vocabulary and in an acceptable pace and have sufficient comprehension skills to understand the language
	06819	American Sign Language—Other	when signed at a normal pace. Other American Sign Language courses.
American Ind	lian Languag	es	

ourse	Course		
Frade	Code	Course Name	Course Description
6 - Foreigr	n Language	e and Literature	
merican Ind	dian Langua	ges	
	06821	American Indian Language I	Designed to introduce students to a American Indian language not otherwise described (e.g., Navajo, Cherokee, and kree) and culture, American Indian Language I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions.
	06822	American Indian Language II	American Indian Language II courses build upon skills developed in American Indian Language I, extending students' ability to understand and express themselves in a American Indian language not otherwise described (e.g., Navajo, Cherokee, and kree) and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of appropriate people to deepen their understanding of the culture(s).
	06823	American Indian Language III	American Indian Language III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.
	06824	American Indian Language IV	American Indian Language IV courses focus on advancing students' skills and abilities to read, write, speak, and understand the American Indian Language being studied so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.
	06830	IB Language A (non-English)—American Indian Language	IB Language A (non-English)—American Indian Language courses prepare students to take the International Baccalaureate Language A exams at either the Subsidiary or Higher level. Course content includes in-depth study of literature chosen from the appropriate IB list of texts and authors, written analyses of this literature, and other oral and written assignments. Course content is designed to improve students' accuracy and fluency in the language, which is usually the students' native tongue.
	06831	IB Language B—American Indian Language	IB Language B—American Indian Language courses prepare students to take the International Baccalaureate Language B exams at either the Subsidiary or Higher level. These courses focus on improving students' accuracy and fluency in oral and written communication (usually in the students' "second" language). Students preparing to take the Subsidiary level exam will be able to understand native speakers; students preparing for the Higher level exam will be able to communicate fluently at native speed.
	06839	American Indian Language—Other	Other American Indian language courses.
8 - Physic	al, Health, a	and Safety Education	
hysical Edu	ıcation		
	08001	Physical Education	Physical Education courses provide students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual
	08005	Fitness/Conditioning Activities	sports, recreational sports, and fitness/conditioning activities. Fitness/Conditioning Activities courses emphasize conditioning activities that help develop muscular strength, flexibility, and cardiovascular fitness.
	08007	Adapted Physical Education	These courses provide physical education activities (sports, fitness, and conditioning) adapted for students with special needs.
	08009	Weight Training	Weight Training courses help students develop knowledge and skills with free weights and universal stations while emphasizing safety and proper body positioning; they may include other components such as anatomy and conditioning.
	08011	Tennis	Tennis courses help students develop knowledge, skills, and abilities related to the sport of singles or doubles tennis, including shots (such as serves, forehand strokes, backhand strokes, and lobs), scoring, and strategy.
	08014	Physical Education Equivalent	These courses award physical education credit for other at-school activities, such as marching

Course	Course	_	
Grade	Code	Course Name	Course Description
•		and Safety Education	
Health Educ	08051	Health Education	Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The courses may also include brief studies of environmental health, personal development, and/or community resources.
	08055	Safety and First Aid	Safety and First Aid courses provide specialized instruction in first aid techniques, cardiopulmonary resuscitation (CPR), relief of obstructed airways, and general safety procedures and behaviors. These courses may include such topics as an overview of community agencies and hotlines providing emergency care and information and opportunities for first aid and CPR certification.
	08056	Health for Parenting Teens	Designed for pregnant teens and/or parents, topics within Health for Parenting Teens courses cover a wide range of both health and parenting issues, typically including prenatal and postnatal care, health and well-being of young parents, child development, stress management, and parental/adult roles. The courses may also involve academic assistance, career exploration, financial management, and so on.
	08099	Health Education—Other	Other Health Education courses.
Drivers' Edu	ucation		
	08151	Drivers' Education—Classroom Only	Drivers' Education—Classroom Only courses provide students with the knowledge to become safe drivers on America's roadways. Topics in these courses include legal obligations and responsibility, rules of the road and traffic procedures, safe driving strategies and practices, and the physical and mental factors affecting the driver's capability (including alcohol and other drugs).
	08152	Drivers' Education—Classroom and Laboratory	Drivers' Education—Classroom and Laboratory courses provide students with the knowledge and experience to become safe drivers on America's roadways. Topics in these courses cover legal obligations and responsibility, rules of the road and traffic procedures, safe driving strategies and practices, and the physical and mental factors affecting the driver's capability (including alcohol and other drugs). Experience in driving a vehicle is an essential component of these courses.
	08197	Drivers' Education—Independent Study	Courses in Drivers' Education—Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to drivers' education. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
09 - Militar	y Science		
Other	09999	Military Science—Other	Other Military Sciences courses.
		_	Other Williamy Sciences Courses.
	-	formation Sciences	
Computer L	10001	Introduction to Computers	Introduction to Computer courses introduce students to computers and peripheral devices, the functions and uses of computers, the language used in the computer industry, possible applications of computers, and occupations related to computer hardware and software. These courses typically explore legal and ethical issues associated with computer use, as well as how computers influence modern society. Students may also be required to perform some computer operations.
	10004	Computer Applications	In Computer Applications courses, students acquire knowledge of and experience in the proper and efficient use of previously written software packages. These courses explore a wide range of applications, including (but not limited to) word-processing, spreadsheet, graphics, and database programs, and they may also cover the use of electronic mail and desktop publishing.
	10005	Business Computer Applications	In Business Computer Applications courses, students acquire knowledge of and experience in the proper and efficient use of previously written software packages, particularly those used in the business world. Generally, these courses explore a wide range of applications, including (but not limited to) word-processing, spreadsheet, graphics, and database programs, and they may also
	10006	Telecommunications	cover topics such as electronic mail, desktop publishing, and telecommunications. Telecommunications courses address the growth in global communications and the emerging equipment and systems needed to successfully communicate in a global environment. These courses cover such topics as data communication protocol and systems, government regulations of the communications industry, and the use of cost-effective and productive tools to transmit messages and data. In these courses, students may learn about such communication systems as e-mail, internet or ecommerce, LAN, WAN, voice transmission, cell phone technology, and traditional teleconferencing.

Course	Course		
Grade	Code	Course Name	Course Description
	•	formation Sciences	
Computer L	10007	IB Information Technology in a Global Society	IB Information Technology in a Global Society courses prepare students to take the International Baccalaureate Information Technology exams and examine the interaction among information, technology, and society. Course content is designed to help students develop a systematic, problemsolving approach to processing and analyzing information using a range of information tools. In these courses, students also discuss and evaluate how modern information technology
	10047	Computer Literacy—Independent Study	affects individuals, relationships among people, and institutions and societies. Computer Literacy—Independent Study courses, often conducted with instructors as mentors, enable students to explore computer-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.
	10048	Computer Literacy—Workplace Experience	Computer Literacy—Workplace Experience courses provide work experience in fields related to computer literacy. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
Managemer	nt Information	n Systems	
	10051	Information Management	Information Management courses provide students with the knowledge and skills to develop and implement a plan for an information system that meets the needs of business. Students develop an understanding of information system theory, skills in administering and managing information systems, and the ability to analyze and design information systems.
	10052	Database Management and Data Warehousing	Database Management and Data Warehousing courses provide students with the skills necessary to design databases to meet user needs. Courses typically address how to enter, retrieve, and manipulate data into useful information. More advanced topics may cover implementing interactive applications for common transactions and the utility of mining data.
	10053	Database Applications	Database Application courses provide students with an understanding of database development, modeling, design, and normalization. These courses typically cover such topics as SELECT statements, data definition, manipulation, control languages, records, and tables. In these courses, students may use Oracle WebDB, SQL, PL/SQL, SPSS, and SAS and may prepare for certification.
	10054	Data Systems/Processing	Data Systems/Processing courses introduce students to the uses and operation of computer hardware and software and to the programming languages used in business applications. Students typically use BASIC, COBOL, and/or RPL languages as they write flowcharts or computer programs and may also learn data-processing skills.
	10055	Particular Topics in Management Information Systems	These courses examine particular topics in management information systems other than those already described.
	10097	Management Information Systems—Independent Study	Management Information Systems—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to management information systems. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.
	10098	Management Information Systems—Workplace Experience	Management Information Systems—Workplace Experience courses provide work experience in fields related to management information systems. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	10099	Management Information Systems—Other	Other Management Information Systems courses.
Network Sy	stems		
	10101 10102	Network Technology Networking Systems	Network Technology courses address the technology involved in the transmission of data between and among computers through data lines, telephone lines, or other transmission media (such as hard wiring, cable television networks, radio waves, and so on). These courses may emphasize the capabilities of networks, network technology itself, or both. Students typically learn about network capabilities—including electronic mail, public networks, and electronic bulletin boards—and network technology—including network software, hardware, and peripherals involved in setting up and maintaining a computer network. Networking Systems courses are designed to provide students with the opportunity to understand and work with hubs, switches, and routers. Students develop an understanding of LAN (local area network), WAN (wide area network), wireless connectivity, and Internet-based communications with a strong emphasis on network function, design, and installation practices. Students acquire skills in the design, installation, maintenance, and management of network systems that may help

Course Grade	Course Code	Course Name	Course Description
		Course Name Iformation Sciences	Course Description
Network Sy	•	normation sciences	
Network by	10103	Area Network Design and Protocols	Area Network Design and Protocols courses address the role of computers in a network system, the Open Systems Interconnection (OSI) model, structured wiring systems, and simple LAN (local
	10104	Router Basics	area network) and WAN (wide area network) designs. Router Basics courses teach students about router components, start-up, and configuration using CISCO routers, switches, and the IOS (Internetwork Operation System). These courses also cover such topics as TCP/IP protocol, IP addressing, subnet masks, and network trouble-shooting.
	10105	NetWare Routing	NetWare Routing courses introduce students to such topics as Virtual LANs (VLAN) and switched internetworking, comparing traditional shared local area network (LAN) configurations with switched LAN configurations, and they also discuss the benefits of using a switched VLAN architecture. These courses also may cover routing protocols like RIP, IGRP, Novell IPX, and Access Control Lists (ACLs).
	10106	Wide Area Telecommunications and Networking	Wide Area Telecommunications and Networking courses provide students with the knowledge and skills to enable them to design Wide Area Networks (WANs) using ISDN, Frame-Relay, and PPP. Students gain knowledge and skills in network management and maintenance and develop expertise in trouble-shooting and assessing the adequacy of network configuration to meet changing conditions.
	10107	Wireless Networks	Wireless Networks courses focus on the design, planning, implementation, operation, and trouble-shooting of wireless computer networks. These courses typically include a comprehensive overview of best practices in technology, security, and design, with particular emphasis on hands-on skills in (1) wireless LAN set-up and trouble-shooting; (2) 802.11a & 802.11b technologies, products, and solutions; (3) site surveys; (4) resilient WLAN design, installation, and configuration; (5) vendor interoperability strategies; and (6) wireless bridging.
	10108	Network Security	Network Security courses teach students how to design and implement security measures in order to reduce the risk of data vulnerability and loss. Course content usually includes typical security policies; firewall design, installation, and management; secure router design, configuration, and maintenance; and security-specific technologies, products, and solutions.
	10109	Essentials of Network Operating Systems	Essentials of Network Operating Systems courses provide a study of multi-user, multi-tasking network operating systems. In these courses, students learn the characteristics of the Linux, Windows 2000, NT, and XP network operating systems and explore a variety of topics including installation procedures, security issues, back-up procedures, and remote access.
	10110	Microsoft Certified Professional (MCP)	Microsoft Certified Professional courses provide students with the knowledge and skills necessary to be employed as a network administrator in the latest Windows server-networking environment. Topics include installing, configuring, and trouble-shooting the Windows server. These courses prepare students to set up network connections; manage security issues and shares; and develop policies. Students are typically encouraged to take the MCP exam.
	10111	Particular Topics in Networking Systems	These courses examine particular topics in networking systems other than those already described.
	10147	Networking Systems—Independent Study	Networking Systems—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to networking systems. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.
	10148	Networking Systems—Workplace Experience	Networking Systems—Workplace Experience courses provide students with work experience in fields related to networking systems. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	10149	Networking Systems—Other	Other Networking Systems courses.
Computer S	Science/Progr	ramming	
	10151	Business Programming	Business Programming courses provide students with experience in using previously written software packages as well as designing and writing programs of their own. The word-processing, spreadsheet, graphics, and database exercises in these courses contain a business industry focus, and the original programs are written in languages typical of this industry (Visual Basic (VB), C++, Java, BASIC, COBOL, and/or RPL).

ourse	Course	Course Nerre	Causaa Baaasintian
irade 10 - Comr	Code	Course Name formation Sciences	Course Description
-	cience/Progr		
omputer o	10152	Computer Programming	Computer Programming courses provide students with the knowledge and skills necessary to construct computer programs in one or more languages. Computer coding and program structure are often introduced with the BASIC language, but other computer languages, such as Visual Basic (VB), Java, Pascal, C++, and COBOL, may be used instead. Initially, students learn to structure, create, document, and debug computer programs, and as they progress, more emphasis is placed on design, style, clarity, and efficiency. Students may apply the skills they learn to relevant applications such as modeling, data management, graphics, and text-processing.
	10153	Visual Basic (VB) Programming	Visual Basic (VB) Programming courses provide an opportunity for students to gain expertise in computer programs using the Visual Basic (VB) language. As with more general computer programming courses, the emphasis is on how to structure and document computer programs and how to use problem-solving techniques. These courses cover such topics as the use of text boxes, scroll bars, menus, buttons, and Windows applications. More advanced topics may include mathematical and business functions and graphics.
	10154	C++ Programming	C++ Programming courses provide an opportunity for students to gain expertise in computer programs using the C++ language. As with more general computer programming courses, the emphasis is on how to write logically structured programs, include appropriate documentation, and use problemsolving techniques. More advanced topics may include multi-dimensional arrays, functions, and records.
	10155	Java Programming	Java Programming courses provide students with the opportunity to gain expertise in computer programs using the Java language. As with more general computer programming courses, the emphasis is on how to structure and document computer programs, using problem-solving techniques. Topics covered in the course include syntax, I/O classes, string manipulation, and recursion.
	10156	Computer Programming—Other Language	Computer Programming—Other Language courses provide students with the opportunity to gain expertise in computer programs using languages other than those specified (such as Pascal, FORTRAN, or emerging languages). As with other computer programming courses, the emphasis is on how to structure and document computer programs, using problem-solving techniques. As students advance, they learn to capitalize on the features and strengths of the language being used.
	10157	AP Computer Science A	Following the College Board's suggested curriculum designed to mirror college-level computer science courses, AP Computer Science A courses provide students with the logical, mathematical, and problem-solving skills needed to design structured, well-documented computer programs that provide solutions to real-world problems. These courses cover such topics as programming methodology, features, and procedures; algorithms; data structures; computer systems; and programmer responsibilities.
	10158	AP Computer Science AB	Following the College Board's suggested curriculum designed to mirror college-level computer science courses, AP Computer Science AB courses (in addition to covering topics included in AP Computer Science A) provide a more formal and extensive study of program design, algorithms, data structures, and execution costs.
	10159	IB Computing Studies	IB Computer Studies courses prepare students to take the International Baccalaureate Computing Studies exam at either the Subsidiary or Higher level. The courses emphasize problem analysis, efficient use of data structures and manipulation procedures, and logical decision-making. IB Computing Studies courses also cover the applications and effects of the computer on modern society as well as the limitations of computer technology.
	10160	Particular Topics in Computer Programming	These courses examine particular topics in computer programming other than those already described.
	10197	Computer Programming—Independent Study	Computer Programming—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to computer programming. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.
	10198	Computer Programming—Workplace Experience	Computer Programming—Workplace Experience courses provide students with work experience in fields related to computer programming. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	10199	Computer Programming—Other	Other Computer Programming courses.

Course Grade	Course Code	Course Name	Course Receivation
		Course Name formation Sciences	Course Description
Media Tech	•		
	10201	Web Page Design	Web Page Design courses teach students how to design web sites by introducing them to and refining their knowledge of site planning, page layout, graphic design, and the use of markup languages—such as Extensible Hypertext Markup, JavaScript, Dynamic HTML, and Document Object Model—to develop and maintain a web page. These courses may also cover security and privacy issues, copyright infringement, trademarks, and other legal issues relating to the use of the Internet. Advanced topics may include the use of forms and scripts for database access, transfer methods, and networking fundamentals.
	10204	Particular Topics in Media Technology	These courses examine particular topics in internet design and applications other than those already described.
	10248	Media Technology—Workplace Experience	Media Technology—Workplace Experience courses provide students with work experience in fields related to media technology. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	10249	Media Technology—Other	Other Media Technology courses.
Information	Support and	Services	
	10251	Computer Technology	Computer Technology courses introduce students to the features, functions, and design of computer hardware and provide instruction in the maintenance and repair of computer components and peripheral devices.
	10252	Computer Maintenance	Computer Maintenance courses prepare students to apply basic electronic theory and principles in diagnosing and repairing personal computers and input/output devices. Topics may include operating, installing, maintaining, and repairing computers, network systems, digital control instruments, programmable controllers, and related robotics.
	10253	Information Support and Services	Information Support and Services courses prepare students to assist users of personal computers by diagnosing their problems in using application software packages and maintaining security requirements.
	10254	IT Essentials: PC Hardware and Software	IT Essentials: PC Hardware and Software courses provide students with in-depth exposure to computer hardware and operating systems. Course topics include the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Students learn to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. In addition, these courses introduce students to networking and often prepare them for industry certification.
	10255	CISCO—The Panduit Network Infrastructure Essentials (PNIE)	CISCO—PNIE courses provide students with the knowledge to create innovative network infrastructure solutions. These courses offer students basic cable installer information and help them acquire the skills to build and use the physical layer of network infrastructure and develop a deeper understanding of networking devices.
	10256	Particular Topics in Information Support and Services	These courses examine particular topics in computer support, maintenance, and repair other than those already described.
	10297	Information Support and Services—Independent Study	Information Support and Services—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to computer information support and services. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.
	10298	Information Support and Services—Workplace Experience	Information Support and Services—Workplace Experience courses provide students with work experience in fields related to information support and/or service. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
All Others	10299	Information Support and Services—Other	Other Information Support and Services courses.
All Guiers	10995	Computer and Information Sciences—Aide	Computer and Information Sciences—Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.
	10998	Computer and Information Sciences—Workplace Experience	Computer and Information Sciences—Workplace Experience courses provide students with work experience in fields related to computer and/or information sciences. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

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Course	Course	O a a series a Name a	Ourse Breedston
Grade	Code	Course Name	Course Description
		s and Audio/Visual Technology	
Communica			
	11048	Communication—Workplace	Communication—Workplace Experience courses provide students with work experience in a field
		Experience	related to communication. Goals are typically set cooperatively by the student, teacher, and
			employer (although students are not necessarily paid). These courses may include classroom
			activities as well, involving further study of the field or discussion regarding experiences that
	\/:daa Taabaa	Is any and Ethn	students encounter in the workplace.
ludio and v	video recnno 11051	logy and Film Audio/Visual Production	And Afficial Developing and a first state of the developing of the first state of the fir
	11031	Audio/visual i Touceaon	Audio/Visual Production courses provide students with the knowledge and skills necessary for television, video, film, and/or radio production. Writing scripts, camera operation, use of graphics and other visuals, lighting, audio techniques, editing, production principles, and career opportunities
			are typical topics covered within production courses. Students are usually required to produce their own program or segment. Additional topics such as broadcast industry regulations, radio/TV operation, power of the medium, photography, transmission technology, and so on may be
			included.
	11097	Audio/Video Technology and	Audio/Video Technology and Film—Independent Study courses, often conducted with instructors
		Film—Independent Study	as mentors, enable students to explore topics of interest related to A/V technology or film.
			Independent Study courses may serve as an opportunity for students to expand their expertise in a
	11000	Acadis A Calos Tool	particular application, to explore a topic in greater detail, or to develop more advanced skills.
	11098	Audio/Video Technology and	Audio/Video Technology and Film—Workplace Experience courses provide students with work
		Film—Workplace Experience	experience in a field related to audio/visual technology and/or film. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid).
			These courses may include classroom activities as well, involving further study of the field or
			discussion regarding experiences that students encounter in the workplace.
ournalism	and Broadca	stina	discussion regulating experiences that state in critical in the non-place.
	11101	Journalism	Journalism courses (typically associated with the production of a school newspaper, yearbook, or
			literary magazine) emphasize writing style and technique as well as production values and
			organization. Journalism courses introduce students to the concepts of newsworthiness and
			press responsibility; develop students' skills in writing and editing stories, headlines, and captions;
			and teach students the principles of production design, layout, and printing. Photography and
	11100	Dhataiaurnaliam	photojournalism skills may be included.
	11102	Photojournalism	Photojournalism courses expose students to the manner in which photography is used to convey
			information and experiences. Typically coordinated with production of the school newspaper, yearbook, or other media product, photojournalism courses provide students with the opportunity to
			improve their photo composition and film development skills, and to apply their art to journalistic
			endeavors.
	11148	Journalism and	Journalism and Broadcasting—Workplace Experience courses provide students with work
		Broadcasting—Workplace	experience in a field related to journalism or broadcasting. Goals are typically set cooperatively by
		Experience	the student, teacher, and employer (although students are not necessarily paid). These courses
			may include classroom activities as well, involving further study of the field or discussion regarding
	44440		experiences that students encounter in the workplace.
	11149	Journalism and	Other Journalism and Broadcasting courses.
rintina T	obnoles: '	Broadcasting—Other	
inung 1e	chnology and		Dealter Dublishing assured interests the branched or and still beauty to conduct a 1999
	11152	Desktop Publishing	Desktop Publishing courses integrate the knowledge and skills learning in word processing with the
			concepts, procedures and application of desktop publishing. Students learn to format, create and proofread brochures, programs, newsletters, web pages, presentations and manuscripts.
	11153	Digital Media Design and	Digital Media Design and Production courses teach students the fundamentals of graphic design
		Production	and production and provide students with the opportunity to apply these principles to printed media,
			digital presentation media, and interactive media.
	11154	Commercial Graphic Design	Commercial Graphic Design courses teach students to use artistic techniques to effectively
			communicate ideas and information to business and customer audiences via illustration and other
			forms of digital or printed media. Topics covered may include concept design, layout, paste-up and
			techniques such as engraving, etching, silkscreen, lithography, offset, drawing and cartooning,
			nainting, college and computer graphics

painting, collage and computer graphics.

		School Courses	
ourse	Course		
rade	Code	Course Name s and Audio/Visual Technology	Course Description
		d Production	
inting re	11155	Graphic Technology	Graphic Technology courses help students apply artistic and computer techniques to the
			interpretation of technical and commercial concepts. Topics covered may include computer
			assisted art and design, printmaking, concept sketching, technical drawing, color theory, imaging,
			studio techniques, still life modeling, and commercial art business operations. Advanced topics may
			include topographic arrangements of print and/or electronic graphic and textual products, printing and lithographic equipment and operations, digital imaging, print preparation, desktop publishing and
			web page design.
	11156	Photography and Printing	Photography and Printing Technology courses expose students to the tools, materials and
		Technology	processes involved in mass production of photography and printing. Types of printing covered in
			the course may include intaglio, relief, planographic, screen processes printing, silk screening,
			serigraphy processes and thermograph. Additional topics may include the use of cameras,
	11157	Photoengraving	composition, imposition, presswork, and computer aided publishing. Photoengraving courses teach students to photograph illustration and other copy that cannot be set
		3 - 3	in type, to develop negatives, and to prepare photosensitized metal plates for use in printing.
	11158	Print Press Operations	These courses expose students to the necessary skills for operating a print press. Topics covered
	4446-		in this course include how to prepare, operate and maintain printing processes.
	11198	Printing Technology—Workplace	Printing Technology—Workplace Experience courses provide students with work experience in a
		Experience	field related to printing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as
			well, involving further study of the field or discussion regarding experiences that students
			encounter in the workplace.
l Others	44005		
	11995	Communication and Audio/Video	Communication and Audio/Video Technology—Aide courses offer students the opportunity to
		Technology—Aide	assist instructors in preparing, organizing or delivering course curricula. Students may provide tutorial or instructional assistance to other students.
	11998	Communication and Audio/Video	Communication and Audio/Video Technology—Workplace Experience courses provide students
		Technology—Workplace	with work experience in a field related to communication or audio/visual technology. Goals are
		Experience	typically set cooperatively by the student, teacher, and employer (although students are not
			necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
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lministrat		· ·	
	12001	Business/Office Career	Business/Office Career Exploration courses expose students to the occupational opportunities
		Exploration	available in the accounting, administration, data processing, management, and secretarial fields.
			Emphasis is placed on responsibilities, qualifications, work environment, and career paths. These
			courses may also include consumer education topics, keyboard exposure, and/or hands-on experience within the various occupational areas.
	12002	Office	Office Procedures—Comprehensive courses provide students with numerous opportunities to
		Procedures—Comprehensive	explore and understand the responsibilities and duties common to most office personnel. These
			comprehensive courses cover such topics as communication skills, reception and transmission of
			information via data processing equipment, filing and record management, mail handling, scheduling
	12003	Office and Administrative	meetings and conferences, creating itineraries, and word processing. Office and Administrative Technologies courses provide students with instruction and experience
	000	Technologies	in developing technical, problem-solving, and decision-making skills essential for office and/or
		5	administrative occupations. Emphasis is placed on integrating and applying knowledge and skills to
			realistic office and administrative situations utilizing current and relevant technology.
	12004	Office Services	Office Services courses introduce students to and help them refine clerical and receptionist skills.
			Course content typically covers filing, telephone, and keyboarding skills; reprographic machinery
	12005	keyboarding	and procedures; communications skills; and so on. keyboarding courses provide students with an introduction to the keyboard (letters, numbers, and
		J	symbols), basic machine operation, and proper keystroke technique. As students progress, they
			improve their speed and accuracy and produce increasingly complex documents. Such courses
	10555		help students develop keyboard proficiency, document production skills, and problem-solving skills.
	12006	Word Processing	Word Processing courses introduce students to automated document production using one or more
			software packages. These courses may introduce keyboarding techniques or may require prior experience; in either case, speed and accuracy are emphasized. A parallel focus is placed on the
			use of software commands and functions to create, edit, format, and manipulate documents,
			capitalizing on the power offered by word processing software programs. These courses may
			also cover file and disk management and other computer-related skills.

Course	Course	One was No	Ourse Breedities
Grade	Code	Course Name	Course Description
Administrat	ness and ma	arketing	
Aummstrat	12009	Business Communications	Business Communications courses help students to develop an understanding and appreciation for effective communication in business situations and environments. Emphasis is placed on all phases of communication: speaking, listening, thinking, responding, reading, writing, communicating nonverbally, and utilizing technology for communication. Business communication functions, processes, and applications in the context of business may be practiced through problem-based
	12048	Administration—Workplace Experience	projects and realworld application. Administration—Workplace Experience courses provide students with work experience in fields related to business administration. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	12049	Administration—Other	Other Administration courses.
Managemen	nt		
	12052	Business Management	Business Management courses acquaint students with management opportunities and effective human relations. These courses provide students with the skills to perform planning, staffing, financing, and controlling functions within a business. In addition, they usually provide a macro-level study of the business world, including business structure and finance, and the interconnections among industry, government, and the global economy. The course may also emphasize problem-based, real-world applications of business concepts and use accounting concepts to formulate, analyze, and evaluate business decisions.
	12053	Entrepreneurship	Entrepreneurship courses acquaint students with the knowledge and skills necessary to own and operate their own businesses. Topics from several fields typically form the course content: economics, marketing principles, human relations and psychology, business and labor law, legal rights and responsibilities of ownership, business and financial planning, finance and accounting, and communication. Several topics surveyed in Business Management courses may also be included.
	12054	Business Law	Business Law courses emphasize legal concepts that are relevant to business and business organizations. Topics examined in these courses typically include contracts, buying/renting property, installment buying, insurance, buyer/seller relationships, negotiable instruments, employment, taxes, insurance, commercial papers, legal organizational structures, and consumer liabilities.
	12055	Business Principles and Management	Business Principles and Management courses are designed to provide students with an understanding of the American business system, its organizations, and its management. These courses examine the various leadership and management styles of a variety of successful business organizations, large or small.
	12056	International Business and Marketing	International Business and Marketing courses examine business management and administration in a global economy. Topics covered in this course typically include the principles and processes of export sales, trade controls, foreign operations and related problems, monetary issues, international business and policy, and applications of doing business in specific countries and markets.
	12057	Human Resources and Labor Relations	Human Resources and Labor Relations courses analyze the functions of conflict resolution and collective bargaining. Typically, students examine the history of the labor movement within the United States, the relationship between management and labor, and how organized labor currently
	12058	Human Resources Management	operates. Human Resources Management courses provide students with an understanding of the effective use of interpersonal skills in achieving the goals of an organization.
	12059	IB Business and Management	IB Business and Management courses prepare students to take the International Baccalaureate Business and Management exam at either the Subsidiary or Higher level. In keeping with Individual and Society courses, IB Business and Management promotes problem-solving by identifying the problem, selecting and interpreting data, applying appropriate analytical tools, and recommending solutions by evaluating their quantitative and qualitative implications. These courses also equip students with knowledge and understanding of business terminology, concepts and principles.
	12098	Management—Workplace Experience	Management—Workplace Experience courses provide students with work experience in fields related to business management. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	12099	Management—Other	Other Management courses.
Finance			

Course	Course		
Grade	Code	Course Name	Course Description
012 - Busin	ess and ma	rketing	
Finance	12102	Banking	Banking courses are similar to Banking and Finance courses, but they focus specifically on banking. These courses may also address examining and applying the methods used for measuring the financial performance of banks in addition to examining specialized brokerage products, current
	12103	Finance	issues, and future trends in banking. Finance courses are similar to Banking and Finance courses, but they focus specifically on finance, addressing how businesses raise, distribute, and use financial resources while managing risk. Course content typically involves modeling financial decisions (such as borrowing, selling
	12104	Accounting	equity or stock, lending or investing) typically undertaken by businesses. Accounting courses introduce and expand upon the fundamental accounting principles and procedures used in businesses. Course content typically includes the full accounting cycle, payroll, taxes, debts, depreciation, ledger and journal techniques, and periodic adjustments. Students may learn how to apply standard auditing principles and to prepare budgets and final reports. Calculators, electronic spreadsheets, or other automated tools are usually used. Advanced topics may include elementary principles of partnership and corporate accounting and the managerial uses of control systems and the accounting process.
	12105	Business Economics	Business Economics courses integrate economic principles (such as free market economy, consumerism, and the role of American government within the economic system) with entrepreneurship/business concepts (such as marketing principles, business law, and risk).
	12106	Risk Management and Insurance	Risk Management and Insurance courses analyze risk management techniques from the viewpoints of those employed in the industry as well as of business owners seeking to meet risk management needs. Insurance products are evaluated in relation to cost and effectiveness.
	12107	Investing	Investing courses emphasize the formulation of business and individual investment decisions by comparing and contrasting the investment qualities of cash, stock, bonds, and mutual funds. Students typically review annual reports, predict growth rates, and analyze trends. Stock market simulations are often incorporated into Investing courses.
	12148	Finance—Workplace Experience	Finance—Workplace Experience courses provide students with work experience in fields related to finance. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
Marketing	12149	Finance—Other	Other Finances courses.
Marketing	12153	Marketing—Fashion	Marketing—Fashion courses typically cover the same scope of topics as Marketing— Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management and entrepreneurship, and so on) but do so with particular attention to the fashion industry. In keeping with the focus on the fashion industry, course topics may also include fashion
	12154	Marketing—Real Estate	cycles, fashion history, design, style, and coordination. Marketing—Real Estate courses typically cover the same scope of topics as Marketing— Comprehensive courses (purchasing, advertising, sales, human relations, management and entrepreneurship, and so on) but do so with particular attention to the real estate industry. In keeping with the focus on real estate, course topics may also include financing, investment,
	12155	Marketing—Transportation	ownership rights, ethics, and other real estate principles. Marketing—Transportation courses typically cover the same scope of topics as Marketing— Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with particular attention to the transportation industry. In keeping with the focus on this industry, topics include identification and proper use of auto parts and accessories and the sales and service of new and used cars, vans, trucks, and related parts.
	12156	Marketing—Food/Beverage Industry	Marketing—Food/Beverage Industry courses typically cover the same scope of topics as Marketing—Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with particular attention to the food and beverage industry. In keeping with the focus on this industry, topics include the unique characteristics and functions of the food and beverage service industry.
	12157	Marketing—Insurance	Marketing—Insurance courses typically cover the same scope of topics as Marketing— Comprehensive courses (purchasing and distribution systems, advertising, display and sales, management, entrepreneurship, and so on) but do so with particular attention to the sale or underwriting of accident, health, life, marine, automobile, and causality insurance.

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Course	Course		
Grade	Code	Course Name	Course Description
012 - Busir	ness and ma	arketing	
Marketing			
	12158	Marketing—Floristry	Marketing—Floristry courses typically cover the same scope of topics as Marketing—
			Comprehensive courses (purchasing and distribution systems, advertising, display and sales,
			management, entrepreneurship, and so on) but do so with particular attention to the floristry
			industry. In keeping with the focus on this field, topics include the unique characteristics and functions of retail and wholesale floral operations.
	12159	Marketing—Hospitality/Tourism	Marketing—Hospitality/Tourism courses typically cover the same scope of topics as
			Marketing—Comprehensive courses (purchasing and distribution systems, advertising, display and
			sales, management, entrepreneurship, and so on) but do so with particular attention to the travel,
			tourism, and lodging industry. In keeping with the focus on this field, topics include the unique
			characteristics and functions of travel services and hotel/motel operations.
	12160	Marketing—Merchandising	Marketing—Merchandising courses are designed to provide students with practical backgrounds in
			retailing, with emphasis on merchandising, promotion/display, selling, and career planning. The
			content of this course may also include fundamental principles of human relations.
	12161	Retail Marketing	Retail Marketing courses cover marketing principles and concepts related to the provision of goods
			or services directly to the consumer, emphasizing store operation, advertisement and display of
	12162	Internet Marketing	goods, store security, human relations, and business management and ownership. Internet Marketing covers the principles and functions of marketing from the standpoint of
	12102	memer warketing	conducting business on the internet. Typically, students develop such skills as using the internet as
			a marketing tool, conducting a marketing analysis via the internet, planning marketing support
			activities, managing an electronic marketing campaign, managing/owning a business via the
			internet, and analyzing the impact of the internet on global marketing.
	12163	Sports and Entertainment	Sports and Entertainment Marketing courses introduce students to and help them refine marketing
		Marketing	and management functions and tasks that can be applied in amateur or professional sports or
			sporting events, entertainment or entertainment events, and the sales or rental of supplies and
	40404	Disciples of Madestine	equipment.
	12164	Principles of Marketing	Principles of Marketing courses offer students insight into the processes affecting the flow of
			goods and services from the producer to the consumer. Course content ranges considerably as
			general marketing principles such as purchasing, distribution, and sales are covered; however, a major emphasis is often placed on kinds of markets; market identification; product planning,
			packaging, and pricing; and business management.
	12165	Principles of Advertising	Principles of Advertising courses expose students to the varied concepts underlying the promotion
		·	of products. The topics included in Principles of Advertising courses range considerably, but
			typically include the psychology of advertising, a study of various media, advertising planning and
			budgeting, and advertising layout and design principles. Course topics may also include an
			overview of commercial art and packaging.
	12166	Marketing Management	Marketing Management courses typically cover the same scope of topics as Marketing—
			Comprehensive courses (purchasing and distribution systems; advertising and sales; and so on)
			but place a particular emphasis on business management and entrepreneurship, providing
	12167	Marketing—Other Specialization	exposure to common techniques and problems of management. Marketing—Other Specialization courses typically cover the same scope of topics as
	12107	Marketing Other Openialization	Marketing—Comprehensive courses (purchasing and distribution systems, advertising, display and
			sales, management, entrepreneurship, and so on) but do so with attention to a particular industry
			not specified above. The course may also cover specific topics related to the particular industry
			being covered.
	12198	Marketing—Workplace	Marketing—Workplace Experience courses provide students with work experience in fields related
		Experience	to marketing. Goals are typically set cooperatively by the student, teacher, and employer (although
			students are not necessarily paid). These courses may include classroom activities as well,
			involving further study of the field or discussion regarding experiences that students encounter in
	12100	Marketing Other	the workplace.
	12199	Marketing—Other	Other Marketing courses.
Sales			
	12201	Cashier/Checker Operations	Cashier/Checker Operations courses provide students with the knowledge and skills to operate a
			cash register and to handle numerous transactions. Topics typically include cash register
			procedures; handling cash, credit, checks, food stamps, and other forms of legal tender; human
			relations; stocking and marking merchandise; and theft prevention. Job search and employability
	12202	Principles of Selling	skills are often an integral part of the course. Principles of Selling courses provide students with the knowledge and opportunity to develop
		· ····oipide di deming	indepth sales competencies. Course content typically includes types of selling, steps in a sale,
			sales strategies, and interpersonal skills and techniques.

NCES Secondary	School Course	s
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Course	Course	Oasses Name	Course Prescription
Grade	Code ness and ma	Course Name	Course Description
Sales	iless allu ille	arketing	
oales	12247	Sales—Independent Study	Sales—Independent Study courses, often conducted with instructors as mentors, enable students to explore sales-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.
	12248	Sales—Workplace Experience	Sales—Workplace Experience courses provide students with work experience in fields related to sales. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	12249	Sales—Other	Other Sales courses.
All Others			
	12995	Business and Marketing—Aide	Business and Marketing—Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.
	12998	Business and Marketing—Workplace Experience	Business and Marketing—Workplace Experience courses provide students with work experience in fields related to business and marketing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
013 - Manւ	ufacturing		
Manufacturi	ing Technolo	gy	
	13002	Manufacturing—Comprehensive	Manufacturing—Comprehensive courses introduce students to the various methods used to process and transform materials. Processing techniques covered usually include casting, forming, separating, assembling, and finishing. The courses may also include an overview of management techniques in planning, organizing, and controlling various segments of the manufacturing process, including design, engineering, production, and marketing.
	13003	Industrial Arts	including design, engineering, production, and marketing. Industrial Arts courses expose students to the tools and machines that they may encounter in manufacturing-related occupations and enable them to develop the skills they need to use these tools in various applications. Course topics typically include (but are not limited to) drawing and planning, electricity, graphic arts, woodwork, leatherwork, metalwork, plastics, and power
	13004	Industrial Safety/First Aid	technology. These courses typically cover general safety and career exploration as well. Industrial Safety/First Aid courses provide students with instruction in safe operating procedures related to various trades, as well as more general training in emergency first aid and CPR. Course topics may include the importance of standard operation procedures, agencies and regulations related to occupational safety and hazard prevention, and the dangers of particular materials.
Processing	/Production		
	13053	Metal and Wood Processing/Production	Metal and Wood Processing/Production courses include studying the properties of metals, woods, and composites and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.
	13054	Wood Processing/Production	Wood Processing/Production courses include studying the properties of woods and composites made from woods and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.
	13055	Metal Processing/Production	Metal Processing/Production courses include studying the properties of metals and metal alloys and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.
	13056	Plastics Processing/Production	Plastics Processing/Production courses include studying the properties of plastics and composites and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.
	13057	Ceramic Processing/Production	Ceramic Processing/Production courses include studying the properties of ceramics and heatresistant composites and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.
	13058	Particular Topics in Processing and Production	These courses examine specific topics in processing and production, such as substance analysis, other than those already described.

Course	Course		
Grade	Code	Course Name	Course Description
	ufacturing /Production		
riocessing/	13097	Processing/Production—Independent Study	Processing/Production—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to processing and production. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular
	13098	Processing/Production—Workpla ce Experience	specialization, to explore a topic in greater detail, or to develop more advanced skills. Processing/Production—Workplace Experience courses provide students with work experience in fields related to manufacturing processing and production. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	13099	Processing/Production—Other	Other Processing/Production courses.
roduction	Systems		
	13101	Production Systems	Production Systems courses provide students with knowledge and skills related to manufacturing technologies from conception through production. Although courses vary, students typically analyze markets, design and develop prototypes, plan a marketing or sales strategy, manage a production plan, and manufacture useful products. These courses may also explore the evolution
	13102	Electro-Mechanical Systems	and impact of technology on society's social, cultural, and economic systems and institutions. Electro-Mechanical Systems courses provide students with instruction and experience in components and equipment that use electricity and the power of physical forces. Students gain an understanding of the principles of electricity and mechanics and their application to gears, cams, levers, circuits, and other devices used in the manufacturing process or within manufactured goods.
	13103	Product Development	Product Development courses provide students with the opportunity to focus on one or more areas of industrial technology, creatively pursuing new knowledge or solving a technological problem, by designing and building prototypes and working models. Students learn and apply appropriate information in order to complete a project.
	13147	Production Systems—Independent Study	Production Systems—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to manufacturing systems and/or research. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.
	13148	Production Systems—Workplace Experience	Production Systems—Workplace Experience courses provide students with work experience in fields related to manufacturing systems and/or research. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	13149	Production Systems—Other	Other Production Systems courses.
letalwork	13201	Metalwork Occupations	Metalwork Occupations courses provide students with theoretical principles and laboratory experiences related to the planning, manufacturing, assembling, testing, and repairing of parts, mechanisms, and structures in which materials are cast, formed, treated, cut, fused, or otherwise
	13202	Metalworking	processed in some fashion. Metalworking courses introduce students to the qualities and applications of various metals and the tools used to manipulate and form metal into products. Through one or more projects involving metals, students develop planning, layout, and measurement skills; gain experience in cutting, bending, forging, casting, and/or welding metal; complete projects according to blueprints or other specifications; and may also learn to polish and finish metals. Correct use of metalworking tools
	13203	Machining	and equipment is stressed. Machining courses enable students to create metal parts using various machine tools and equipment. Course content may include interpreting specifications for machines using blueprints, sketches, or descriptions of parts; preparing and using lathes, milling machines, shapers, and grinders with skill, safety, and precision; developing part specifications; and selecting appropriate materials.
	13204	Particular Topics in Machining	These courses examine specific topics related to machining, emphasizing a particular type of
	13205	Sheet Metal	machine, tool, or procedure, or concentrating on a particular application of machining techniques. Sheet Metal courses expose students to the skills and information necessary to lay out, fabricate, assemble, install, maintain, and repair items and structures created from sheet metal components. Students learn the safe and efficient operation of various tools and typically gain skill in blueprint
	13206	Particular Topics in Sheet Metal	reading, welding, and finishing and polishing metals. In these courses students gain knowledge and skills in particular aspects of sheet metal. Examples include individual courses in radial line development, triangulation fabrication, and so on.

NCES Secondary School Courses

Course	Course		
Grade	Code	Course Name	Course Description
013 - Manuf	facturing		
Metalwork	13207	Welding	Welding courses enable students to gain knowledge of the properties, uses, and applications of various metals, skills in various processes used to join and cut metals (such as oxyacetylene, shielded metal, metal inert gas, and tungsten arc processes), and experience in identifying, selecting, and rating appropriate techniques. Welding courses often include instruction in
	13208	Particular Topics in Welding	interpreting blueprints or other types of specifications. In these courses students gain knowledge and skills in particular aspects of welding. Examples include individual courses in each of the following types of welding: gas metal, gas tungsten, and shielded metal and flux core arc welding.
	13209	Particular Topics in Metalwork	In these courses students gain knowledge and skills in particular aspects of metalwork (such as foundry work or metallurgy) not otherwise described.
	13247	Metalwork—Independent Study	Metalwork—Independent Study courses, often conducted with instructors as mentors, enable students to explore metalwork-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic
	13248	Metalwork—Workplace Experience	in greater detail, or to develop more advanced skills. Metalwork—Workplace Experience courses provide students with work experience in the welding, machine technologies, or metalwork fields. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	13249	Metalwork—Other	Other Metalwork courses.
Repair	13301	Appliance Repair	Appliance Repair courses provide students with the knowledge and experience to repair, install, service, and inspect appliances such as stoves, refrigerators, washers, dryers, air conditioners, water heaters, and so on. Students gain an understanding of the mechanics and working systems of these appliances, the skills to read blueprints and specifications, and proficiency in using related tools and products.
	13302	Equipment Maintenance and Repair	tools and products. Equipment Maintenance and Repair courses prepare students to adjust, maintain, replace, and repair parts of machinery and to repair tools, equipment, and machines. The courses may have a general emphasis or may focus on a specific type of machinery or equipment related to a particular industry. Depending upon the intent, course topics may include electric, hydraulic, or mechanic systems; control devices, valves, and gates; or supplemental equipment such as fans, hoses, and
	13347	Repair—Independent Study	pipes. Repair—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to repair. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.
	13348	Repair—Workplace Experience	Repair—Workplace Experience courses provide students with work experience in the fields involving repair, supported by classroom attendance and discussion. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or
	13349	Repair—Other	discussion regarding experiences that students encounter in the workplace. Other Repair courses.
All Others	13995	Manufacturing—Aide	Manufacturing—Aide courses offer interested students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.
	13998	Manufacturing—Workplace Experience	Manufacturing—Workplace Experience courses provide students with work experience in fields involving manufacturing, supported by classroom attendance and discussion. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

014 - Health Care Sciences

Therapeutic Services

Course	Course	a	
Grade	Code	Course Name	Course Description
	th Care Scie	inces	
Therapeutic	14051	Nursing	Nursing courses place a special emphasis on the particular knowledge and skills required of nurses and/or nursing assistants and aides while covering general health care topics (i.e., patient care, anatomy and physiology, medical terminology, hygiene and disease prevention, first aid and CPR, and laboratory procedures). Topics covered typically include normal growth and development; bathing, feeding, dressing, and transporting patients; basic pharmacology; doctor, nurse, and
	14052	Nursing—LPN	patient relationships and roles; medical and professional ethics; death and dying; and care of various kinds of patients (e.g., chronically ill, children, new mothers, and so on). Covering the same scope of topics as Nursing courses, Nursing—LPN courses delve into more depth in order to prepare students for the state's practical nurse licensing examination. Nursing—LPN courses offer the knowledge and experience needed to provide nursing care for patients of all ages, in various stages of sickness or health, and with a variety of disease conditions. Additional topics covered may include community health, nutrition, drug therapy and administration, and mental illness.
	14053	Home Health Care	Home Health Care courses teach students how to care for individuals within their homes. Course content relates health care practices and procedures to the home environment, and typically includes patient care, comfort, and safety; anatomy and physiology; the prevention of disease and infection; nutrition and meal preparation; human relations; and first aid and CPR. Topics covered
	14054	Dental Science	may also include therapy strategies, household management, and employability. Dental Science courses expose students to the tools, terminology, and procedures necessary for a career in the dental industry. Course content covers a wide range of topics and typically includes dental anatomy and terminology; the identification and use of dental equipment; dental pathologies and procedures; asepsis; dental laboratory procedures; emergency first aid; and the ethical and legal responsibilities of dental care workers. These courses often explore dental specialties and career options.
	14055	Emergency Medical Technology	Emergency Medical Technology courses place a special emphasis on the knowledge and skills needed in medical emergencies. Topics typically include clearing airway obstructions, controlling bleeding, bandaging, methods for lifting and transporting injured persons, simple spinal immobilization, infection control, stabilizing fractures, and responding to cardiac arrest. The courses may also cover the legal and ethical responsibilities involved in dealing with medical emergencies.
	14056	Surgical Technology	Surgical Technology courses emphasize the care and needs of patients undergoing surgery while covering general health care topics (i.e., patient care, anatomy and physiology, medical terminology, hygiene and disease prevention, first aid and CPR, and laboratory procedures). In keeping with that focus, topics may include operation room materials, tools, and procedures; aseptic surgical techniques; preparation and handling of surgical instruments; efficiency in the operating room; and the roles of various medical personnel who are present during surgery.
	14057	Vision Care	Vision Care courses expose students to the tools, terminology, and procedures necessary for a career in the optometric or optic field. Vision Care courses typically include the physics of light and refraction; the anatomy, physiology, and terminology associated with the eyes; identification and use of optometric and/or optical equipment; optical procedures; human relations; and the ethical and
	14058	Optometrics	legal responsibilities of vision care workers. Optometrics courses provide students with the knowledge, ability, and experiences to prepare, assemble, and/or fit corrective lenses prescribed by a physician or optometrist. Topics covered may include layout and marking, cutting and chipping, edging and beveling, inspection, alignment, dispensing, and selection of eyewear.
	14059	Gerontology	Gerontology courses provide students with knowledge and understanding of the processes of adult development and aging. Topics covered may include the study of the biological, economic, psychological, social, and health/fitness aspects of the aging process.
	14060	Physical Therapy	Physical Therapy courses provide students with the knowledge and skills necessary to work with patients who need to achieve and maintain functional rehabilitation and to prevent malfunction or deformity. Topics covered typically include therapeutic exercises and activities (such as stretching and strengthening), how to train patients to perform the activities of daily living, the use of special equipment, and evaluation of patient progress.
	14061	Respiratory Therapy	Respiratory Therapy courses provide students with the knowledge and skills necessary to work with patients who have breathing or other cardiopulmonary difficulties or disorders. Topics covered typically include identifying deficiencies and abnormalities of the cardiopulmonary system, understanding the various methods of therapies, and understanding how to use special equipment.

Course	Course		
Grade	Code	Course Name	Course Description
	th Care Scie	ences	
Therapeution	14062	Care of Athletes	Care of Athletes courses provide students with the knowledge and skills to understand and perform therapeutic tasks that would be designated by an athletic or fitness trainer. Topics covered may include taping and bandaging, proper use of protective padding, treatment modalities, anatomy and physiology, and medical terminology. Students may learn to measure cardiorespiratory endurance, muscular strength and endurance, flexibility, body composition, and blood pressure. More advanced topics may include injury assessment, the phases of healing, and the use of exercise and equipment to help in the reconditioning of injured athletes.
	14063	Particular Topics in Therapeutic Services	These courses examine particular topics in medical therapeutic services other than those already described.
	14097	Therapeutic Services—Independent Study	Therapeutic Services—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to therapeutic services. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.
	14098	Therapeutic Services—Workplace Experience	Therapeutic Services—Workplace Experience courses provide students with work experience in fields related to therapeutic services. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	14099	Therapeutic Services—Other	Other Therapeutic Services courses.
Diagnostic	Services		
	14101	Dental Laboratory Technology	Dental Laboratory Technology courses expose students to the principals, tools, terminology, and procedures necessary for a career in a dental laboratory. These courses typically cover many of the same topics as Dental Science, but emphasize making mouth guards, taking impressions, creating various types of dental molds and models, and fabricating prostheses and dental appliances.
	14102	Medical Lab Technology	Medical Lab Technology courses provide students with the knowledge and skills necessary for employment in health care-related laboratories. Topics include basic principles of anatomy and physiology, relevant concepts in microbiology and chemistry, and laboratory techniques (including preparation and analysis of various cultures and specimens). The courses may also cover such components as venipuncture, EkG, and CPR procedures.
	14103	EkG Technology	In EkG Technology courses, students acquire the knowledge and skills to perform electrocardiograph activities and learn about the cardiovascular system (including its function, diseases, and rhythms); EkG machinery; and the use of drugs and their effects. These courses usually include general health care topics as well, such as basic anatomy and physiology, patient care, first aid and CPR, identification and use of medical equipment, and medical terminology.
	14104	Phlebotomy	In Phlebotomy courses, students acquire knowledge, skills, and experiences related to the drawing of blood and typically learn about such topics as infection control, sterilization practices, medical/hospital procedures and environments, diagnostic procedures, and the process of drawing blood.
	14105	Particular Topics in Diagnostic Services	These courses examine particular topics in diagnostic services other than those already described.
	14147	Diagnostic Services—Independent Study	Diagnostic Services—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to diagnostic services. Independent Study courses may provide students with an opportunity to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.
	14148	Diagnostic Services—Workplace Experience	Diagnostic Services—Workplace Experience courses provide students with work experience in fields related to diagnostic services. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	14149	Diagnostic Services—Other	Other Diagnostic Services courses.
Health Infor			
	14151	Medical/Clerical Assisting	Medical/Clerical Assisting courses enable students to develop knowledge and skills that combine the medical and clerical fields. Students typically develop skills such as patient exam preparation, assessment of vital signs, routine lab procedures, medical transcription, financial accounting, patient and insurance company billing, and record-keeping.

Course Grade	Course Code	Course Name	Course Description
014 - Healtl			Oduroc Besoniption
Health Inforr	mation		
	14152	Pharmacy Assisting	Pharmacy Assisting courses emphasize the knowledge and skills necessary to assist a pharmacist or pharmacy technician. Course topics and experiences enable students to understand medical terminology, keep and maintain records, label medications, perform computer patient billing, perform stock inventory, and order supplies. These courses also emphasize pharmaceutical classification,
	14153	Medical Office Procedures	drug interactions, and interpersonal/communication skills. Medical Office Procedures courses expose students to clerical knowledge, abilities, and procedures as they apply to the medical field. These courses typically include (but are not limited to) topics such as medical transcription, medical insurance, financial accounting, scheduling, and patient record-keeping. Medical terminology and routine medical procedures are covered to provide a context for clerical duties.
	14154	Medical Terminology	In Medical Terminology courses, students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.
	14155	Particular Topics in Health Information	These courses examine particular topics in health Information other than those already described.
	14197	Health Information—Independent Study	Health Information—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to health information systems. Independent Study courses may provide students with an opportunity to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.
	14198	Health Information—Workplace Experience	Health Information—Workplace Experience courses provide students with work experience in fields related to health Information. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	14199	Health Information—Other	Other Health Information courses.
Support Ser			
	14201 14202	Central Service Technology Health Support Services	Central Service Technology courses provide students with knowledge and skills related to the procurement, handling, storage, and distribution of sterile goods and equipment. Course components usually include quality assurance, infection control and isolation techniques, medical terminology and processes, decontamination and sterilization, microbiology, and chemistry. Health Support Services courses provide students with knowledge and skills to be used in activities that support patients' primary health care, such as counseling, health education, disease management, and risk reduction. Because support services can be widely defined, course topics
	14203	Health Unit Coordination	typically also include general health care, such as anatomy and physiology, medical terminology, first aid and CPR procedures, and ethical and legal responsibilities. Health Unit Coordination courses provide students with instruction and experiences so that they can manage components of nonpatient care activities in health care facilities. Topics covered usually include medical terminology, transcription, and general reception duties and responsibilities; recordkeeping; and stocking medical and office supplies and equipment.
	14204	Particular Topics in Support Services	These courses examine particular topics in health support services other than those described.
	14247	Health Support Services—Independent Study	Health Support Services—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics related to health support services. Independent Study courses may provide students with an opportunity to expand their expertise in a particular specialization, to explore a topic in greater detail, or to develop more advanced skills.
	14248	Health Support Services—Workplace Experience	Health Support Services—Workplace Experience courses provide students with work experience in careers related to health support services. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	14249	Health Support Services—Other	Other Health Support Services courses.
Health Scien	nces		
	14251	Health Science	Health Science courses integrate chemistry, microbiology, chemical reactions, disease processes, growth and development, and genetics with anatomy and physiology of the body systems. Typically, these courses reinforce science, mathematics, communications, health, and social studies principles and relate them to health care.

Course	Course		
rade	Code	Course Name	Course Description
14 - Healtl	n Care Scie	nces	
ealth Scien	ces		
	14252	Biotechnology	Biotechnology courses involve the study of the bioprocesses of organisms, cells, and/or their
			components and enable students to use this knowledge to produce or refine products, procedures,
			and techniques. Course topics typically include laboratory measurement, monitoring, and
			calculation; growth and reproduction; chemistry and biology of living systems; quantitative
			problem-solving; data acquisition and display; and ethics. Advanced topics may include elements of
	14253	Pharmacalagy	biochemistry, genetics, and protein purification techniques.
	14233	Pharmacology	Pharmacology courses involve a study of how living animals can be changed by chemical substances, especially by the actions of drugs and other substances used to treat disease. Basic
			concepts of physiology, pathology, biochemistry, and bacteriology are typically brought into play as
			students examine the effects of drugs and their mechanisms of action.
	14254	Particular Topics in Health	These courses examine particular topics in health sciences other than those already described.
		Sciences	
	14297	Health Sciences—Independent	Health Sciences—Independent Study courses, often conducted with instructors as mentors,
		Study .	enable students to explore health-related topics of interest. Independent Study courses may
			provide students with an opportunity to expand their expertise in a particular specialization, to
			explore a topic in greater detail, or to develop more advanced skills.
	14298	Health Sciences—Workplace	Health Sciences—Workplace Experience courses provide students with work experience in fields
		Experience	involving the health sciences. Goals are typically set cooperatively by the student, teacher, and
			employer (although students are not necessarily paid). These courses may include classroom
			activities as well, involving further study of the field or discussion regarding experiences that
	14299	Health Sciences—Other	students encounter in the workplace. Other Health Sciences courses.
	14200	Tiediai Gelenees Guiei	Other Fleditin Colembes Courses.
II Others			
	14995	Health Care Sciences—Aide	Health Care Sciences—Aide courses offer students the opportunity to assist instructors in
			preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional
	14998	Health Care	assistance to other students. Health Care Sciences—Workplace Experience courses provide students with work experience in
	11000	Sciences—Workplace	the health care industry. Goals are typically set cooperatively by the student, teacher, and
		Experience	employer (although students are not necessarily paid). These courses may include classroom
			activities as well, involving further study of the field or discussion regarding experiences that
			students encounter in the workplace.
15 - Public	, Protective	e, and Government Services	
	45004		
	15001	Exploration of Public Service	Exploration of Public Service Careers courses expose students to the duties, responsibilities,
		Careers	requirements, and career opportunities within public service. Course topics vary and may include (but are not limited to) protective services; correction, judicial, and probation services; fire
			protection and fire fighting; public administration; and social work. Course activities depend upon
			the career clusters that students explore.
aw Enforce	ment		• • •
	15051	Criminal Justice	Criminal Justice courses train students to understand and apply the principles and procedures
			essential to the U.S. criminal justice system. These courses explore the principles and structure of
			the justice system and the law, and course content also typically includes investigation, search and
			arrest, and laboratory, forensic, and trial procedures. Students may also learn CPR and first aid
	45050	Oppositions	skills, personal defense tactics, and crime prevention techniques.
	15052	Corrections	Corrections courses provide instruction regarding the principles and techniques used by institutions
	15052	Deutie des Toutes to Lo	that incarcerate, rehabilitate, and monitor people accused or convicted of crimes.
	15053	Particular Topics in Law	These courses examine specific topics related to law enforcement (such as forensic science),
	15097	Enforcement Independent	rather than provide a general study of the field.
	10001	Law Enforcement—Independent Study	Law Enforcement—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to law enforcement. Independent Study
		Olddy	courses may serve as an opportunity for students to expand their expertise in a particular
			application, to explore a topic in greater detail, or to develop more advanced skills.
	15098	Law Enforcement—Workplace	Law Enforcement—Workplace Experience courses provide work experience in fields related to
		Experience	law enforcement. Goals are typically set cooperatively by the student, teacher, and employer
		•	(although students are not necessarily paid). These courses may include classroom activities as
			well, involving further study of the field or discussion regarding experiences that students
			encounter in the workplace.

Course	Course		
Grade	Code	Course Name	Course Description
015 - Public	, Protective	e, and Government Services	
Security and			
	15101	Public Safety	Public Safety courses introduce students to the field of public safety and extend their knowledge and skills pertaining to the safety and security of homes, workplaces, and the community. These courses cover such topics as policing, law enforcement, emergency service, and private security and corrections and may cover all or a subset of these services.
	15102	Security Services	Security Services courses provide instruction regarding the safety and security of buildings and facilities and may extend these lessons to include the security and safety of one's self and other human beings.
	15103	Particular Topics in Security	These courses examine specific topics related to security and protective services, rather than provide a general study.
	15147	Security and	Security and Protection—Independent Study courses, often conducted with instructors as mentors,
		Protection—Independent Study	enable students to explore topics of interest related the security and protection of the public. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	15148	Security and	Security and Protection—Workplace Experience courses provide work experience in fields related
		Protection—Workplace Experience	to security and protection. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	15149	Security and Protection—Other	Other Security and Protection courses.
Fire Manager	ment		
	15151	Fire Science	Fire Science courses introduce students to the field of fire prevention and control and enable them to extend their knowledge through the use of chemical, physical, and engineering principles to understand factors involved in fires. Course topics typically include the chemistry of combustion, factors that influence fire (such as structural design and meteorology), and safety procedures.
	15152	Fire Fighting	Fire Fighting courses offer students the opportunity to learn fire prevention and control under controlled conditions. Typically, students learn about the organization, rules, requirements, and regulations of fire departments; study and practice the tools and techniques used by firefighters to control or extinguish fires; and examine the behavior of fires. These courses also usually include emergency medical procedures and present fire investigation techniques.
	15153	Particular Topics in Fire Management	These courses examine specific topics related to fire management (such as hazardous materials handling), rather than provide a general study of the field.
	15197	Fire Management—Independent Study	Fire Management—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related fire management. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	15198	Fire Management—Workplace Experience	Fire Management—Workplace Experience courses provide work experience in fields related to fire management. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	15199	Fire Management—Other	Other Fire Management courses.
Government	Service		
	15201	Public Administration	Public Administration courses provide an overview of the structure, roles, and duties of public
			governments and associated agencies. These courses explore the foundation and evolution of the public service sector, issues related to the provision of services by governmental bodies, and the missions and constraints of various departments within local and state governments. In addition, students may explore a particular public administration topic (such as the tax base and structure, the legislative process, selection of public servants, resource management, and so on) in greater detail.
	15202	Community Protection	Community Protection courses provide students with information regarding the personnel and agencies concerned with protection of the home, city, state, and nation. Topics covered typically include civil defense and disaster preparedness; crime prevention; pollution control; fire prevention and control; legal and social systems and principles; and public health. These topics may be explored from the viewpoint of a community resident and citizen using these services or of that of one interested in pursuing a public service career.

NCES Secondary	School	Courses
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Course	Course	Course Name	Course Pecerintian
Grade	Code	Course Name e, and Government Services	Course Description
Government	·	e, and Government Gervices	
	15203	Public Policy	Public Policy courses provide students with the opportunity to design, propose, and analyze programs and policies implemented by government agencies. Activities typically include identifying social issues and problems, generating recommendations, using data to quantify the extent of a problem or evaluate its solution, communicating ideas and findings, and understanding decision-making processes.
	15247	Government Service—Independent Study	Government Service—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related the provision of government services. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	15248	Government Service—Workplace Experience	Government Service—Workplace Experience courses provide work experience in fields related to government service. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	15249	Government Service—Other	Other Government Service courses.
	15995	Public, Protective, and Government Service—Aide	Public, Protective, and Government Service—Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.
	15997	Public, Protective, and Government Service—Independent Study	Public, Protective, and Government Service—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to public, protective, and government service. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	15998	Public, Protective, and Government Service—Workplace Experience	Public, Protective, and Government Service—Workplace Experience courses provide students with work experience in a field related to public, protective, and/or government service. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	15999	Public, Protective, and Government Service—Other	Other Public, Protective, and Government Service courses.
016 - Hospi	itality and T	ourism	
	16001	Exploration of Hospitality Careers	Exploration of Hospitality Careers courses survey a wide array of topics while exposing students to the variety of career opportunities in hospitality fields (such as food service, lodging, tourism, and recreation). These courses serve to introduce students to the general field of hospitality, providing an opportunity to identify a focus for continued study.
Restaurant,		verage Services	
	16051	Exploration of Restaurant, Food and Beverage Services	Exploration of Restaurant, Food, and Beverage Services courses provide students with an overview of the restaurant, food, and beverage service industry. Topics covered include industry terminology, the history of restaurant, food, and beverage services, introduction to marketing, and the various careers available in the industry.
	16052	Restaurant, Food and Beverage Services—Comprehensive	Restaurant, Food, and Beverage Services—Comprehensive courses provide students with knowledge and skills related to commercial and institutional food service establishments. Course topics range widely, but usually include sanitation and safety procedures, nutrition and dietary guidelines, food preparation (and quantity food production), and meal planning and presentation. Restaurant, Food, and Beverage Service courses may include both "back-of-the-house" and "front-of-the-house" experiences, and may therefore also cover reservation systems, customer service, and restaurant/business management.
	16053	Food Service	Food Service courses provide instruction regarding nutrition, principles of healthy eating, and the preparation of food. Among the topics covered are large-scale meal preparation, preserving nutrients throughout the food preparation process, use and care of commercial cooking equipment, food storage, advances in food technology, sanitation, management, and the careers available in the food service industry.

NCES Secondary	School	Courses
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Course	Course		
Grade	Code	Course Name	Course Description
016 - Hosp	itality and 1	Tourism	
Restaurant,	Food and Be	everage Services	Nutrition and Food Drangation courses provide at idente with knowledge and skills shout food
	10054	Nutrition and Food Preparation	Nutrition and Food Preparation courses provide students with knowledge and skills about food preparation and/or production, with a strong emphasis on nutrition, balanced diets, and satisfying
			special dietary needs. Topics typically include assessing nutrient content, the science of food and
			nutrition, physiology and utilization of nutrients. Course content may also cover additives,
	16055	Restaurant Management and	contaminants, foodborne illnesses, and food technology. Restaurant Management and Operations courses provide students with knowledge and skills
		Operations	related to commercial and institutional food service establishments, with an emphasis on
			management. Course topics therefore include guest service and relationships, planning, resource
	16056	Culinary Art Specialty	management, and other topics related to managing and operating restaurants. Culinary Art Specialty courses provide instruction in a particular type of cooking or culinary style.
	10000	Camillary 7 are openionly	Examples of such specialty fields include baking, creating and decorating wedding cakes, Middle
			Eastern cuisine, and so on. These courses emphasize skills specific to the type of culinary art
	16057	Porticular Tanica in Doctourant	being studied.
	10037	Particular Topics in Restaurant, Food and Beverage Services	These courses examine specific topics related to Restaurant, Food, and Beverage Services, such as catering, rather than provide a general study of the industry or of specific topics already
			described.
	16097	Restaurant, Food and Beverage	Restaurant, Food, and Beverage Services—Independent Study courses, often conducted with
		Services—Independent Study	instructors as mentors, enable students to explore topics of interest within the restaurant, food, and beverage services industry. Independent Study courses may serve as an opportunity for
			students to expand their expertise in a particular application, to explore a topic in greater detail, or
	40000	5	to develop more advanced skills.
	16098	Restaurant, Food and Beverage Services—Workplace	Restaurant, Food, and Beverage Services—Workplace Experience courses provide work experience in fields related to restaurant, food, and beverage services. Goals are typically set
		Experience	cooperatively by the student, teacher, and employer (although students are not necessarily paid).
			These courses may include classroom activities as well, involving further study of the field or
	16099	Restaurant, Food and Beverage	discussion regarding experiences that students encounter in the workplace. Other Restaurant, Food and Beverage Service courses.
		Services—Other	
Lodging			
	16101	Exploration of Lodging Careers	Exploration of Lodging Careers courses provide an overview of the lodging industry. Topics
			covered include lodging terminology, the history of lodging, introduction to marketing, and the various careers available in the lodging industry.
	16102	Lodging—Comprehensive	Lodging—Comprehensive courses introduce students to the lodging industry and refine their
			related knowledge and skills. Topics covered typically include property management, guest
			psychology and relationships, lodging operations, food and beverage services, and other topics related to support services within the lodging industry.
	16103	Institutional Maintenance	Institutional Maintenance courses present the knowledge and skills required for service work within
			institutions. Topics covered typically include housekeeping and laundry services, care and cleaning
			of facilities, and safety and sanitation procedures, in addition to career opportunities, business responsibilities, and other types of ongoing maintenance.
	16104	Particular Topics in Lodging	These courses examine specific topics in lodging such as convention planning or hotel
			management rather than provide a general study of the industry or of specific topics already
	16147	Lodging—Independent Study	described. Lodging—Independent Study courses, often conducted with instructors as mentors, enable
			students to explore topics of interest within the lodging industry. Independent Study courses may
			serve as an opportunity for students to expand their expertise in a particular application, to explore
	16148	Lodging—Workplace Experience	a topic in greater detail, or to develop more advanced skills. Lodging—Workplace Experience courses provide work experience in fields related to lodging.
		gg	Goals are typically set cooperatively by the student, teacher, and employer (although students are
			not necessarily paid). These courses may include classroom activities as well, involving further
	16149	Lodging—Other	study of the field or discussion regarding experiences that students encounter in the workplace. Other Lodging courses.
Travel and T			and the state of t
i i avei and I	16151	Introduction to Travel and	Introduction to Travel and Tourism courses provide an overview of the travel and tourism industry.
		Tourism	Topics covered in this course may include travel and tourism terminology, the history of travel,
			introduction to marketing, and the various careers available in travel and tourism.

NCES Se	condary S	chool Courses	
Course	Course		
Grade	Code	Course Name	Course Description
)16 - Hosp	oitality and 1	Tourism	
ravel and	Tourism		
	16152	Travel and	Travel and Tourism—Comprehensive courses provide the knowledge and skills necessary to work
		Tourism—Comprehensive	in the travel industry such as sales techniques, marketing principles, and entrepreneurial skills. Additional skills learned in these courses typically include travel agency procedures, airline
			reservation systems, public relations, hotel/motel registration systems and services, and
	16153	World Travel and Tourism	conference and convention planning. World Travel and Tourism courses provide the knowledge and skills necessary to work in the travel
	10100	World Travel and Tourion	industry, with a focus on travel outside of the United States. Topics covered may include
			geography of the continents; customs, cultures, and tourist destinations in other countries; special
			documentation needed for international travel; and planning events to client specifications.
	16154	Eco-tourism	Eco-tourism courses provide the knowledge and skills necessary to work in the travel industry,
			with particular attention paid to conservation and environmental issues surrounding travel and
			tourism. Topics covered may include recreational opportunities related to on- and off-site
	40455		attractions and environmental and ecological principles.
	16155	Particular Topics in Travel and	These courses examine specific topics in travel and tourism such as the airline reservation and
		Tourism	ticketing system rather than provide a general study of the industry or of specific topics already described.
	16197	Travel and	Travel and Tourism—Independent Study courses, often conducted with instructors as mentors,
		Tourism—Independent Study	enable students to explore topics of interest within the travel and tourism industry. Independent
		,	Study courses may serve as an opportunity for students to expand their expertise in a particular
			application, to explore a topic in greater detail, or to develop more advanced skills.
	16198	Travel and Tourism—Workplace	Travel and Tourism—Workplace Experience courses provide work experience in fields related to
		Experience	travel and tourism. Goals are typically set cooperatively by the student, teacher, and employer
			(although students are not necessarily paid). These courses may include classroom activities as
			well, involving further study of the field or discussion regarding experiences that students
	16199	Travel and Tourism—Other	encounter in the workplace. Other Travel and Tourism courses.
			Strot Travol and Tourism Courses.
ecreation,	-	and Attractions	
	16201	Exploration of Recreation,	Exploration of Recreation, Amusement, and Attractions courses provide an overview of the
		Amusement and Attractions	recreation industry. Topics covered in this course may include industry terminology; the history of
			recreation, amusement, and attractions; introduction to marketing; and the various careers available in the industry.
	16202	Recreation, Amusement and	Recreation, Amusement, and Attractions—Comprehensive courses provide students with the
		Attractions—Comprehensive	attitudes, skills, and knowledge needed for employment in theme parks, attractions and outdoor
			recreation facilities, exhibitions, and event planning. Topics covered may include planning trade
			shows, fairs, and conferences; outdoor recreation and management; financial transactions;
			salesmanship; guest services and satisfaction; culture and customs; computer and industry
			technology; eco-tourism; client information; and planning specialized events while incorporating
	16202		themes, timelines, budgets, target audiences, agendas, and public relations.
	16203	Particular Topics in Recreation,	These courses examine specific topics in recreation, amusement, and attractions such as local
	16247	Amusement and Attractions Recreation, Amusement and	opportunities rather than provide a general study of the industry.
	10271	Attractions—Independent Study	Recreation, Amusement, and Attractions—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest within the recreation,
		, and ottorio - macpendent olddy	amusement, and attractions industry. Independent Study courses may serve as an opportunity for
			students to expand their expertise in a particular application, to explore a topic in greater detail, or
			to develop more advanced skills.
	16248	Recreation, Amusement and	Recreation, Amusement, and Attractions—Workplace Experience courses provide work
		Attractions—Workplace	experience in fields related to recreation, amusement, and attractions. Goals are typically set

cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or

Hospitality and Tourism—Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional

discussion regarding experiences that students encounter in the workplace.

Other Recreation, Amusement and Attractions courses.

assistance to other students.

16249

16995

Experience

Recreation, Amusement and

Hospitality and Tourism—Aide

Attractions—Other

	oonaary o	chool Courses	
Course Grade	Course	Oasses Name	Course Persyllation
	Code	Course Name	Course Description
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	16997	Hospitality and	Hospitality and Tourism—Independent Study courses, often conducted with instructors as mentors,
		Tourism—Independent Study	enable students to explore topics of interest within the hospitality and tourism industry. Independent
			Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	16998	Hospitality and	Hospitality and Tourism—Workplace Experience courses provide work experience in fields related
		Tourism—Workplace Experience	to hospitality and tourism. Goals are typically set cooperatively by the student, teacher, and
			employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that
			students encounter in the workplace.
	16999	Hospitality and Tourism—Other	Other Hospitality and Tourism courses.
017 - Arch	itecture and	I Construction	
Constructio	on-General		
	17001	Construction Careers Exploration	Construction Career Exploration courses expose students to the opportunities available in
			construction-related trades, such as carpentry, masonry, air conditioning/refrigeration, plumbing, and so on. Students learn about the processes involved in construction projects and may engage in
			a variety of small projects. These courses emphasize responsibilities, qualifications, work
			environment, rewards, and career paths within construction-related fields.
	17002	Construction—Comprehensive	Construction—Comprehensive courses provide students with basic knowledge and skills required for construction of commercial, residential, and institutional structures. These courses provide
			experiences and information (typically including career opportunities and training requirements)
			regarding construction-related occupations such as carpentry, cabinetmaking, bricklaying, electrical
			trades, plumbing, concrete masonry, and so on. Students engage in activities such as reading
			blueprints, preparing building sites, starting foundations, erecting structures, installing utilities, finishing surfaces, and providing maintenance.
	17003	Carpentry	Carpentry courses provide information related to the building of wooden structures, enabling
			students to gain an understanding of wood grades and construction methods and to learn skills
			such as laying sills and joists; erecting sills and rafters; applying sheathing, siding, and shingles; setting door jambs; and hanging doors. Carpentry courses may teach skills for rough construction,
			finish work, or both. Students learn to read blueprints, draft, use tools and machines properly and
			safely, erect buildings from construction lumber, perform finish work inside of buildings, and do
			limited cabinet work. Carpentry courses may also include career exploration, good work habits, and employability skills.
	17004	Framing Carpentry	Framing Carpentry courses provide students with much of the same knowledge as general
			carpentry courses (knowledge of various types and grades of woods, proper and safe use of
			hand and power tools, and site selection and preparation), but place a special emphasis on construction methods applicable to floor, wall, roof, and/or stair framing. Course content may also
			include insulation installation and painting.
	17005	Particular Topics in Carpentry	These courses cover specific aspects of building construction or carpentry. All coursework
			focuses upon a particular skill or set of skills related to one subtopic, such as floor framing, wall and partition framing, interior finishing, or exterior finishing.
	17006	Woodworking	Woodworking courses introduce students to the various kinds of woods used in industry and offer
			experience in using selected woodworking tools. Students design and construct one or more
			projects and may prepare a bill of materials. Correct and safe use of tools and equipment is
			emphasized. As students advance, they focus on learning the terminology necessary to use power tools successfully, developing skills to safely use these tools in the workshop and becoming
			familiar with various kinds of wood-finishing materials. Advanced students typically design a
	17007	Cabinatmakina	project, prepare bills of materials, construct, and finish proposed projects.
	17007	Cabinetmaking	Cabinetmaking courses provide students with experience in constructing cases, cabinets, counters, and other interior woodwork. Students learn to distinguish between various types of
			furniture construction and their appropriate applications, and how to use various woodworking
			machines and power tools for cutting and shaping wood. Cabinetmaking courses cover the
			different methods of joining pieces of wood, how to use mechanical fasteners, and how to attach hardware. Initial topics may resemble those taught in Woodworking courses; more advanced topics
			may include how to install plastic laminates on surfaces and how to apply spray finishes.
	17008	Masonry	Masonry courses enable students to learn to construct interior and exterior walls, columns,
			doorways, window openings, fireplaces, chimneys, and foundations from brick and concrete
			block. Along with other activities, students may mix and spread cement and mortar, read blueprints and plans, and estimate materials needed for a project. Other topics may also include how to layout
			buildings on footings and how to establish grades using a surveying transit.

NCES Secondary	School	Courses
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Course	Course		
Grade	Code	Course Name	Course Description
		Construction	
Constructio	17009	Building Maintenance	Building Maintenance courses train students to maintain commercial, industrial, and residential buildings and homes. Instruction is provided in the basic maintenance and repair of air conditioning, heating, plumbing, electrical, and other mechanical systems. Topics covered may include identifying and using hand and power tools safely; installing and repairing floor coverings, walls, and ceilings; installing and repairing doors, windows, screens, and cabinets; applying finishes to prepared
	17010	Home Maintenance	surfaces; and repairing roofs, masonry, plumbing, and electrical systems. Home Maintenance courses provide students with knowledge and skills related to devices and systems found in the home. Course content may include electrical wiring, plumbing, window and door repair and installation, wall and floor repair and finishing, furniture repair and finishing, and
	17011	Wall Finishings	small appliance repair. Wall Finishings courses prepare students to finish exterior or interior surfaces by applying protective coating materials such as paint, lacquer, wallpaper, plaster, or stucco. Course topics may include instruction in making, mixing, and matching paint colors; applying coating with various
	17012	Upholstering	types of equipment; applying wallpaper; lathing, preparing surfaces, smoothing, and finishing. Upholstering courses prepare students in all aspects of upholstering furniture. Topics covered may include installing, repairing, arranging, and securing the springs, filler, padding and cover materials of chairs, couches and mattresses; cutting, sewing and trimming; cushion filling, tufting, and
	17047	General Construction—Independent Study	buttoning; and wood refinishing. General Construction—Independent Study courses, often conducted with instructors as mentors, enable students to explore construction-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	17048	General Construction—Workplace Experience	General Construction—Workplace Experience courses provide work experience in a field related to construction. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	17049	General Construction—Other	Other General Construction courses.
Air Conditio	ning, Heating	g, and Plumbing	
	17051 17052	Air Conditioning Refrigeration	Air Conditioning courses offer students specialized training related to the design, installation, and repair of air conditioning systems for residential and commercial use. These courses may emphasize the theory and design of electrical, electronic, mechanical, and pneumatic control systems used in air conditioning systems; they might also (or instead) focus on procedures used in troubleshooting, servicing, and installing components of air conditioning systems. Refrigeration courses provide students with exposure to and training in the theories, equipment, and skills needed to design, install, and repair commercial and residential refrigeration systems. Course topics typically include the theory of thermodynamics, measurement of pressures and temperatures, components and common accessories of refrigeration systems, and repair and
	17053	Heating	safety procedures. Heating courses offer students training specific to the design, installation, and repair of heating systems for residential use. Topics typically include electric, gas, and/or steam systems; ventilation
	17054	Air Conditioning/Refrigeration	procedures; safety practices; and installation and trouble-shooting techniques. Air Conditioning/Refrigeration courses enable students to develop the combined skills and knowledge to install, maintain, adjust, and repair both air conditioning and refrigeration systems.
	17055	Air Conditioning, Heating, and Refrigeration	In Air Conditioning, Heating, and Refrigeration courses, students learn the basic principles of these systems, along with how to identify and safely use tools/equipment used in the trade.
	17056	Heating, Ventilation, and Air Conditioning	These courses synthesize basic and advanced principles in heating, ventilation, and air conditioning and include topics such as air filtration methods, humidity control, and the installation and maintenance of heat pumps, furnaces, and air conditioners. Students also learn about climate control systems; electrical wiring; systems design; sizing, fabricating, and installing ductwork; installing and maintaining climate control systems; and safety.
	17057	Particular Topics in HVACR	These courses offer students specialized training in aspects or topics that are common to various climate control systems (heating, ventilation, air conditioning, and refrigeration systems); such topics may include electrical components, diagrams and blueprints, welding and soldering techniques, and so on.
	17058	Plumbing	Plumbing courses provide students with instruction in installing waste and vent systems, water and gas pipes, trim, and fixtures. Skills taught include cutting and joining various types of pipe (for instance, steel, plastic) using various methods (cement, seat method, and so on).

Course	Course		
Grade	Code	Course Name	Course Description
		Construction	
ir Conditio	oning, Heating 17059	g, and Plumbing Plumbing and Heating	Plumbing and Heating courses address the installation, assembly, maintenance, and repair of piping, plumbing, heating equipment, and water and drainage systems. Topics covered include the computation of heat losses and BTU requirements and blueprint reading. Students gain experience with electric, gas, and oil furnaces; vacuum pumps; air compressors; and mechanical and pneumatic testing equipment.
	17097	Air Conditioning, Heating and Plumbing—Independent Study	Air Conditioning, Heating, and Plumbing—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to air conditioning, heating and plumbing. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	17098	Air Conditioning, Heating and Plumbing—Workplace Experience	Air Conditioning, Heating, and Plumbing—Workplace Experience courses provide work experience in a field related to air conditioning, heating, and/or plumbing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	17099	Air Conditioning, Heating and Plumbing—Other	Other Air Conditioning, Heating and Plumbing courses.
ectricity/E	Electronics		
	17101	Exploration of Electricity/Electronics	Exploration of Electricity/Electronics courses offer instruction in the theory of electricity and in the terminology, skills, and safety procedures common to careers involving electricity and electronics. Topics include (but are not limited to) Ohm's law, electrical equipment, wire systems, and so on; career exploration is often (but not always) an integral part of these courses.
	17102	Electricity—Comprehensive	Electricity—Comprehensive courses provide a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in the electrical field. These courses typically include AC and DC circuitry, safety, and the National Electrical Code and may cover such skills as those involved in building circuits; wiring residential, commercial, and/or industrial buildings; installing lighting, power circuits, and cables; and estimating job costs. As students progress, their projects become more complex and expansive. In these courses, safety is stressed, and a career exploration component may be offered.
	17103	Residential Wiring	Covering many of the same topics as Electricity—Comprehensive courses, Residential Wiring courses apply the knowledge and skills that students acquire to the electrical systems found in family dwellings. Because these courses emphasize residential electricity, topics may also include cable installation, telephone systems, and the installation of lighting fixtures, outlets, and so on. Maintenance and repair skills are often included as course topics.
	17104	Industrial Electricity	Covering many of the same topics as Electricity—Comprehensive courses, Industrial Electricity courses apply the knowledge and skills that students acquire to the electrical systems used in industry. Because of this emphasis, these courses may also cover the installation of transformers and control devices, emergency generator systems, and other industrial applications.
	17105	Particular Topics in Electricity	These courses provide students with specialized knowledge and help them develop skills in particular topics concerning the nature, behavior, and application of electrical current.
	17106	Electronics—Comprehensive	Electronics—Comprehensive courses provide a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in the electronic field as well as typically cover the theory of electricity. Course topics may include AC, DC, analog, and integrated circuitry and solid state and digital devices, amplifiers, and semiconductors. Skills covered may involve the repair, maintenance, and building of electronic equipment such as radios, television sets, and industrial equipment.
	17107	Particular Topics in Electronics	Individual courses in this category offer specialized training in topics related to electronics such as diodes, transistors, digital techniques, solid-state devices, analog circuits, and microprocessors.
	17108	Electricity/Electronics—General	Electricity/Electronics—General courses teach fundamental concepts of electricity and electronics, including safety procedures, and may introduce students to the available occupations in electrical and electronic industries. Topics covered typically include components of circuits; reading schematics and diagrams; electricity and electronics as sources of energy; signal transmission; and using equipment common to these occupations, such as ammeters, voltmeters, capacitor checkers, transistor testers, signal generators, and ohmmeters.
	17109	Particular Topics in	These courses provide instruction in the theory and skills needed in fields involving electricity and
		Electricity/Electronics	electronics and related fields that focus on electrical wiring or electronic signals.

Course	Course		
Grade	Code	Course Name	Course Description
		d Construction	
Electricity/E	17110	Analog and Digital Circuits	In these courses, analog and digital circuits and systems are compared. Topics covered include binary and continuously variable currents and signals (typically in the context of voltage), waveforms, signal loss and distortion, modulation, and signal processing. These courses may also
	17111	Analog Circuits	introduce other media, such as sound waves and liquids. Analog Circuit courses emphasize currents and voltages that have continuously variable signals and, due to that emphasis, concentrate on signal modulation, transmission and reception, signal loss and distortion, and waveforms. These courses may also address conversion techniques.
	17112	Digital Circuits	Digital Circuit courses emphasize currents and voltages that have binary states and, due to that emphasis, concentrate on transmission and reception of binary data, signal loss, and processing circuitry. These courses may also address conversion techniques.
	17147	Electricity/Electronics—Independ ent Study	Electricity/Electronics—Independent Study courses, often conducted with instructors as mentors, enable students to explore electricity- or electronics-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	17148	Electricity/Electronics—Workplac e Experience	Electricity/Electronics—Workplace Experience courses provide students with work experience in a field related to electricity and/or electronics. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	17149	Electricity/Electronics—Other	Other Electricity/Electronics courses.
	17995	Architecture and Construction—Aide	Architecture and Construction—Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.
	17997	Architecture and Construction—Independent study	Architecture and Construction—Independent Study courses, often conducted with instructors as mentors, enable students to explore architecture and construction-related topics of interest. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	17998	Architecture and Construction—Workplace Experience	Architecture and Construction—Workplace Experience courses provide students with work experience in a field related to architecture or construction. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	17999	Architecture and Construction—Other	Other Architecture and Construction courses.
018 - Agric	culture, Foo	d, and Natural Resources	
	18001	Introduction to Agriculture and Natural Resources	Introduction to Agriculture courses survey a wide array of topics within the agricultural industry, exposing students to the many and varied types of agriculture and livestock career opportunities and to those in related fields (such as natural resources). These courses serve to introduce students to the agricultural field, providing them an opportunity to identify an area for continued study or to determine that their interest lies elsewhere. They often focus on developing communication skills, business principles, and leadership skills.
	18002	Agriculture—Comprehensive	Agriculture—Comprehensive courses cover a wide range of agricultural topics, including plant and animal science, production, and processing; agricultural mechanics, including tool and machine operation and repair; construction and repair of farm structures; business operations and management; and the careers available in the agricultural industry. They may also include topics such as chemical and soil science, ecology, agricultural marketing, and veterinary science.
	18003	Agriculture and Natural Resources—Comprehensive	Agriculture and Natural Resources—Comprehensive courses cover a wide range of topics concerning agriculture and natural resources, including plant and animal science, production, and processing; environmental science and conservation; ecology; agricultural mechanics; agricultural construction; business operations and management; and the careers available in the agricultural/natural resources industry. They may also include topics such as chemical and soil
Plant Syste	ms		science, forestry, agricultural marketing, and veterinary science.

Course	Course		
Grade	Code	Course Name	Course Description
018 - Agri	culture, Foo	d, and Natural Resources	
Plant Syste		Dignat Droduction/Coinne	
	18051	Plant Production/Science	Plant Production/Science courses provide knowledge about the propagation of plants for food and fiber. These courses may cover such topics as soil science, irrigation, pest and weed control, food
			and fiber processing, and farm operations. They may also cover the knowledge and skills needed
	40050	On a small Handfard to as	to produce all types of crops or may emphasize a particular area of the agricultural industry.
	18052	General Horticulture	General Horticulture courses expose students to the art and science of growing plants, shrubs, trees, flowers, fruits, and vegetables. In doing so, they cover a wide variety of topics, including
			greenhouse and nursery operations, soils and media mixtures, fruit and vegetable production,
			turf/golf course management, interior and exterior plantscaping, irrigation systems, weed and pest
	10053	Ornamantal Hartiaultura	control, and floral design.
	18053	Ornamental Horticulture	Similar to General Horticulture, Ornamental Horticulture courses provide information regarding the care and propagation of plants, flowers, trees, and shrubs, but place a special emphasis on those
			used for decorative and aesthetic purposes. Because of this particular emphasis, Ornamental
			Horticulture courses usually concentrate on nurseries and greenhouses and on the floristry
	18054	Turf and Landacene	industry.
	10034	Turf and Landscape Management	Turf and Landscape Management courses provide instruction that incorporates plant science, soil and media mixtures, plant identification and optimal environments, and landscape design. These
			courses emphasize applying such knowledge and skill to the design, establishment, and
			maintenance of lawns, parks, open space, and similar environments.
	18055	Soil Science	Soil Science courses involve the study of soil properties, including soil chemistry, biology, fertility, mineralogy, and hydrology. Topics covered may also include soil conservation, irrigation, and
			management.
	18056	Particular Topics in Plant	These courses examine specific topics related to Plant Systems, such as floral design,
	10007	Systems	hydroponics, or landscaping, rather than provide a general study of plant systems or horticulture.
	18097	Plant Systems—Independent Study	Courses in Plant Systems—Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to plant systems. Independent Study courses
		otady	may serve as an opportunity for students to expand their expertise in a particular application, to
			explore a topic in greater detail, or to develop more advanced skills.
	18098	Plant Systems—Workplace	Plant Systems—Workplace Experience courses provide work experience in fields related to plant
		Experience	systems (care, propagation, and processing). Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include
			classroom activities as well, involving further study of the field or discussion regarding
	10000	Plant Contains Other	experiences that students encounter in the workplace.
	18099	Plant Systems—Other	Other Plant Systems courses.
Animal Sys		Animal Production/Science	Asiand Broduction (Osiona and State of
	18101	Animal Production/Science	Animal Production/Science courses impart information about the care and management of domestic and farm animals. These courses may cover animal nutrition, health, behavior, selection,
			reproduction, anatomy and physiology, facilities, product processing, and marketing. Students may
			study a particular species (swine, cattle, horses, fowl, sheep, and so on), or they may learn how
	18102	Small Animal Care	to care for and maintain livestock as a more inclusive study.
	10102	Small Ammai Care	Small Animal Care courses focus on the care and management of small animals. Animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, handling and
			training, and grooming are typical areas of study. Course topics may include kennel operations and
	40402	Laura Animal Can	sales.
	18103	Large Animal Care	Large Animal Care courses focus on the care and management of large animals. Animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, handling and
			training, and grooming are typical areas of study. Course topics may include product processing
			and marketing.
	18104	Equine Science	Equine Science courses focus on the care and management of horses. Animal nutrition, health,
			behavior, reproduction and breeding, anatomy and physiology, facilities, handling and training, and grooming are typical areas of study.
	18105	Veterinary Science	Veterinary Science courses impart information about the causes, diagnosis, and treatment of
			diseases and injuries of animals, typically emphasizing domestic and farm animals. Course topics
			focus on anatomy and physiology, nutrition, behavior, and reproduction, but may also include other
	18106	Particular Topics in Animal	areas of study as appropriate. These courses examine specific topics related to animal care and management, production, or
		Systems	processing, such as equine training or animal waste management, rather than provide a general
			study of animal care and the systems related to their growth and management.

Course	Course		
Grade	Code	Course Name	Course Description
018 - Agric	culture, Foo	d, and Natural Resources	
Animal Sys		A: 10 / 1 / 1 /	
	18147	Animal Systems—Independent Study	Courses in Animal Systems—Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to animal systems. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	18148	Animal Systems—Workplace Experience	Animal Systems—Workplace Experience courses provide work experience in fields related to animal systems (management, care, and/or processing). Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	18149	Animal Systems—Other	Other Animal Systems courses.
Agribusines		A suite vaisa and Maria surrent	
	18201	Agribusiness Management	Agribusiness Management courses provide students with the information and skills necessary for success in agribusiness and in operating entrepreneurial ventures in the agricultural industry. These courses may cover topics such as economic principles, budgeting, risk management, finance, business law, marketing and promotion strategies, insurance, and resource management. Other possible topics include developing a business plan, employee/employer relations, problem-solving and decisionmaking, commodities, and building leadership skills. These courses may also incorporate a survey of the careers within the agricultural industry.
	18202	Agricultural Entrepreneurship	Agricultural Entrepreneurship courses focus on the personal skills necessary for success in entrepreneurial ventures in the agricultural industry. Topics include setting goals, assessing and solving problems, evaluating financial progress and success, business planning, information management and evaluation, and recordkeeping.
	18203	Agricultural Leadership	Agricultural Leadership courses help students develop leadership skills with a focus on opportunities in the food, fiber, and natural resources industries. Topics may include but are not limited to human relationships and effective communication, decision-making and problem-solving, leadership qualities and styles, and ensuring successful completion of group activities.
	18204	Particular Topics in Agribusiness	These courses examine specific topics related to Agribusiness, such as international agriculture or commodities, rather than provide a general study of agribusiness principles.
	18247	Agribusiness—Independent Study	Courses in Agribusiness—Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to agribusiness. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	18248	Agribusiness—Workplace Experience	Agribusiness—Workplace Experience courses provide work experience in fields related to agribusiness. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	18249	Agribusiness—Other	Other Agribusiness Courses
Agricultural	l Production/l	Processing	
	18301	Agricultural Production	Agricultural Production courses combine content related to animal and plant production, providing comprehensive coverage of the production functions of the agricultural industry. These courses typically cover such topics as care and management of farm animals, crop production and harvesting, plant and animal insect and disease control, efficient resource management, and farm management.
	18302	Agricultural Processing	Agricultural Processing courses impart the knowledge and skills needed to bring animal and plant products to market. They may cover a wide variety of topics, including care and maintenance of animals or plants, quality selection and preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Agricultural Processing courses may present an overview of agricultural processing or may specialize in particular types of products.
	18303	Plant Processing	Plant Processing courses impart the knowledge and skills needed to bring plant products to market. They may cover a wide variety of topics, including plant production, quality selection and preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Plant Processing courses may present an overview of product processing or may specialize in specific plant products.

NCES Sec	ondary	School	Courses
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Course	Course		
Grade	Code	Course Name	Course Description
018 - Agric	ulture, Food	I, and Natural Resources	
Agricultural	Production/P	Processing	
	18304	Animal Processing	Animal Processing courses impart the knowledge and skills needed to bring animal products to market. Although these courses may present an overview of animal care and maintenance, they typically emphasize quality selection, product preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Animal Processing courses may present an overview of several types of animal products or may specialize in particular products, such as meat, leather, wool, dairy products, and so on.
	18305	Food Product Processing	Food Product Processing courses impart the knowledge and skills needed to produce and manufacture food products for the consumer market. These courses focus on food products while covering a variety of topics, such as quality selection and preservation, equipment care and sanitation, government regulations, marketing, consumer trends, and product research and development.
	18306	Aquaculture	Aquaculture courses impart the knowledge and skills needed for producing fish, plants, and other species living in an aquatic environment, and course topics typically include the selection, propagation, harvesting, and marketing of those species. Instruction may also address aquatic and marine biology, ecosystems, water quality and management, and business practices.
	18307	Agriculture and Society	Agriculture and Society courses provide an overview of the importance of, impact on, and relationships between agricultural endeavors and society at large. These courses typically emphasize economic and environmental factors and impacts (such as urban and agricultural water use) and the influences of society on agricultural endeavors (including production, processing, and distribution). Current technological advances (such as genetic engineering) may also be discussed.
	18308	Agricultural Biotechnology	Agricultural Biotechnology courses apply biological principles and understanding to plant and animal science in order to produce or refine agricultural products. Course topics typically include but are not limited to microbiology, genetics, growth and reproduction, structural basis of function in living systems, chemistry of living systems, quantitative problem-solving, and data acquisition and display. These courses also often cover the ethics of biotechnology.
	18309	Particular Topics in Agricultural Production/Processing	These courses examine specific topics related to producing and processing agricultural products (such as meat cutting) rather than provide a general study of production or processing.
	18347	Agricultural Production and Processing—Independent Study	Courses in Agricultural Production and Processing—Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to agricultural production and processing. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	18348	Agricultural Production and Processing—Workplace Experience	Agricultural Production and Processing—Workplace Experience courses provide students with work experience in fields related to agricultural production and processing. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	18349	Agricultural Production and Processing—Other	Other Agricultural Production and Processing courses.
Agricultural	Mechanics a	nd Construction	
	18401	Agriculture Mechanics/Equipment/Structures	Agriculture Mechanics/Equipment/Structures courses provide students with the skills and knowledge that are specifically applicable to the tools and equipment used in the agricultural industry. While learning to apply basic industrial knowledge and skills (engine mechanics, power systems, welding, and carpentry, among others), students may explore a broad range of topics, including the operation, mechanics, and care of farm tools and machines; the construction and repair of structures integral to farm operations; a study of electricity and power principles; and safety procedures.
	18402	Agriculture Mechanics and Equipment	Agriculture Mechanics and Equipment courses provide students with the engineering and power technology principles, skills, and knowledge that are specifically applicable to the agricultural industry. Typical topics include the operation, maintenance, and repair of power, electrical, hydraulic, and mechanical systems.
	18403	Agriculture Structures	Agriculture Structures courses provide students with the skills and knowledge that are specifically applicable to the construction, maintenance, and repair of structures integral to the agricultural industry, including but not limited to animal enclosures, irrigation systems, and storage facilities. In these courses, students typically study design, planning, and construction knowledge and skills (such as survey, carpentry, plumbing, concrete, and electrical systems), in addition to the safe operation of tools and machines.

Course	Course		
Grade	Code	Course Name	Course Description
•	·	d, and Natural Resources	
Agricultura	18404	and Construction Agriculture Welding	Agriculture Welding courses provide students with the skills and knowledge that are specifically applicable to the tools and equipment used in the agricultural industry. In learning to apply basic industrial knowledge and skills (engines, power, welding, and carpentry, among others), students may explore a broad range of topics, including the operation, mechanics, and care of farm tools and machines; the construction and repair of structures integral to farm operations; an introduction or review of electricity and power; and safety procedures.
	18405	Particular Topics in Agricultural Mechanics and Construction	These courses examine specific topics related to agricultural mechanics and construction, such as specific vehicles or structures, rather than provide a general study of mechanics and construction techniques.
	18447	Agricultural Mechanics and Construction—Independent Study	Courses in Agricultural Mechanics and Construction—Independent Study, often conducted with instructors as mentors, enable students to topics of interest related to agricultural mechanics and/or construction. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	18448	Agricultural Mechanics and Construction—Workplace Experience	Agricultural Mechanics and Construction—Workplace Experience courses provide work experience in fields related to agricultural mechanics and construction. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	18449	Agricultural Mechanics and Construction—Other	Other Agricultural Mechanics and Construction courses.
Natural Res	sources 18501	Wildlife Management	
	18502	Forestry	Often with an emphasis on the conservation of natural resources and frequently including outdoor recreation topics, Wildlife Management courses provide students with the opportunity to understand and appreciate the importance of maintaining the land and ecological systems that enable nondomesticated animals to thrive. Wildlife Management courses emphasize how humans and animals may both take advantage of the same land or how to gain economic benefits from the land while not degrading its natural resources or depleting plant or animal populations. Forestry courses provide students with the information and experience necessary for the cultivation, management, and care of forests or timberlands. Forestry courses cover topics such as the processes of regeneration and reforestation, harvesting and conservation of natural resources, erosion and pest control, trail development and maintenance, mapping and surveying, operation of forestry tools, government regulations, environmental stewardship, and recreational use of forests.
	18503	Forestry Harvesting	Forestry Harvesting courses involve the study of methods to manage, protect, and harvest timber stands and specialty forest crops; equipment maintenance and repair; the selection, planting, transplanting, and harvesting of trees; forest management; and safety procedures.
	18504	Natural Resources Management	Natural Resources Management courses combine the fields of ecology and conservation with planning for the efficient use and preservation of land, water, wildlife, and forests. Within the general area of natural resources management, these courses usually cover specific topics and uses, such as hunting or fishing preserves, forest production and management, wildlife preservation, and human outdoor recreation.
	18505	Particular Topics in Natural Resources	These courses examine specific topics related to natural resources, such as urban forestry or hunter education, rather than provide a general study of natural resource principles and topics.
	18547	Natural Resources—Independent Study	Courses in Natural Resources—Independent Study, often conducted with instructors as mentors, enable students to explore topics of interest related to natural resources. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	18548	Natural Resources—Workplace Experience	Natural Resources—Workplace Experience courses provide students with work experience in fields related to natural resources. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	18549	Natural Resources—Other	Other Natural Resources courses.
	18995	Agriculture, Food, and Natural Resources—Aide	Agriculture, Food, and Natural Resources—Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.

NCES Secondary	School	Courses
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Course	Course		
Grade	Code	Course Name	Course Description
118 - Agric	culture, Foo	d, and Natural Resources	
	18997	Agriculture, Food, and Natural Resources—Independent Study	Courses in Agriculture, Food, and Natural Resources—Independent Study, often conducted with instructors as mentors, enable students to explore topic of interest related to agriculture, food, and natural resources. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	18998	Agriculture, Food, and Natural Resources—Workplace Experience	Agriculture, Food, and Natural Resources—Workplace Experience courses provide students with work experience in fields related to agriculture, food, and natural resources. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	18999	Agriculture, Food, and Natural Resources—Other	Other Agriculture, Food, and Natural Resources courses.
)19 - Huma	an Services		
	19001	Human Services Career Exploration	Human Services Career Exploration courses introduce and expose students to the career opportunities pertaining to the provision of personal and consumer services for other human beings. Course topics vary and may include (but are not limited to) caring for others, education, cosmetology, apparel/textiles, entrepreneurship, labor laws, and customer service. Course activities depend upon the careers being explored.
Child and E	lder Care		
	19051	Child Care	Child Care courses provide students with knowledge about the physical, mental, emotional, and social growth and development of children from birth through childhood. Main topics include the fundamentals of working with infants, toddlers, and older children; providing healthy environments; evaluating child care settings; and the practices, regulations, and opportunities in the child care industry. Often, Child Care courses provide students with practical experience in a child care center. Advanced topics may include various learning theories; development of activities; operation of a child care center; recognition of childhood diseases, abuse, and neglect; and first
	19052	Child Development	aid/emergency training. Child Development classes provide students with knowledge about the physical, mental, emotional, and social growth and development of children from conception to pre-school age, emphasizing the application of this knowledge in child care settings. These courses typically include related topics
	19053	Elder Care	such as the appropriate care of infants, toddlers, and young children. Elder Care courses emphasize the care of human beings as they grow older. These courses involve the study of the biological, physiological, social, and psychological needs and concerns of the elderly, and deal with the aging process, death, and dying in a realistic manner. Elder Care courses may cover work and personal habits appropriate to the field, and may also offer the
	19054	Caregiving Service	opportunity to explore various careers. Caregiving Service courses emphasize the care of human beings who are unable or who need assistance to care for themselves. These courses involve the study of the biological, physiological, social, and psychological needs and concerns of young children, the elderly, and/or the disabled. Additional topics may include planning daily routines; appropriate environments and activities; growth and aging processes; and techniques for managing a center or working in others' homes.
	19055	Particular Topics in Child and Elder Care	These courses examine specific topics related to child and elder care, such as regulations of the industry or caring for people with special needs, rather than providing a general study of child and elder care.
	19097	Child and Elder Care—Independent Study	Child and Elder Care—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to child and elder care. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	19098	Child and Elder Care—Workplace Experience	Child and Elder Care—Workplace Experience courses provide students with work experience in fields related to caring for others. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	19099	Child and Elder Care—Other	Other Child and Elder Carecourses.
Cosmetolog	ay.		

Course	Course		
Grade	Code	Course Name	Course Description
019 - Huma Cosmetology			
Cosmetolog	19101	Cosmetology—Licensing	Cosmetology—Licensing courses provide students with the knowledge and skills applicable to the care of hair, skin, and nails, and prepare students for the state's Board of Cosmetology examinations. Almost always a series of courses with a specified number of instructional hours, Cosmetology— Licensing courses also require applied experience. Course content covers such topics as human anatomy and skin conditions, chemistry and bacteriology, sanitation and sterilization, state laws and regulations, and shop management. These courses provide students with experiences in shampooing, cutting, styling, bleaching, coloring, tinting, waving, and relaxing
	19102	Barbering	hair and providing facials and manicures. Barbering courses provide students with the skills and experience to shave, style, and trim mustaches and beards and to cut, shampoo, and style hair. Course topics include hygiene, skin and scalp disease, and use of equipment. Barbering courses may aim to prepare students for the state's licensing examinations, and may include topics similar to those included in Cosmetology courses.
	19103	Hair Styling	Hair Styling courses provide students with the skills and experience to cut, shampoo, and style hair. Course topics include hygiene, skin and scalp disease, and use of equipment. These courses provide students with experiences in shampooing, cutting, styling, bleaching, coloring, tinting, waving, and relaxing hair.
	19104	Cosmetology—Non-licensing	Cosmetology—Non-licensing courses provide students with the knowledge and skills applicable to the care of hair, skin, and nails, but do not necessarily prepare students for the state's Board of Cosmetology examinations. Students gain experience in hair care, facials, and manicures; course topics usually include human anatomy, sanitation and sterilization, and related chemistry and
	19105	Cosmetology—Nail Specialization	bacteriology. Shop management and state regulations may also be included. Cosmetology—Nail Specialization courses offer students experience in providing manicures, pedicures, and nail extension treatments. These courses may also include topics such as hygiene, entrepreneurship, human relations, and other related subject matter.
	19106	Cosmetology—Facial Specialization	Cosmetology—Facial Specialization courses offer students information and experience related to skin care, the provision of facials, make-up application, and facial massage. These courses may also include topics such as hygiene and sanitation, human anatomy and skin conditions, entrepreneurship, and/or human relations.
	19107	Particular Topics in Cosmetology	These courses examine specific topics related to cosmetology not otherwise described, such as electrolysis, rather than providing a general study.
	19147	Cosmetology—Independent Study	Cosmetology—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to cosmetology. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	19148	Cosmetology—Workplace Experience	Cosmetology—Workplace Experience courses provide students with work experience in the cosmetology field. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	19149	Cosmetology—Other	Other Cosmetology Carecourses.
Education	19151	Teaching Profession	Teaching Profession courses introduce students to the principles underlying teaching and learning, the responsibilities and duties of teachers, and the techniques of imparting knowledge and information. These courses typically expose students to and train them in classroom management, student behavior, leadership and human relations skills, assessment of student progress, teaching
	19152	Educational Methodology	strategies, and various career opportunities in the field of education. Educational Methodology courses prepare students to teach and guide others. These courses typically provide opportunities for students to develop their own teaching objectives, to design lesson plans, and to experience teaching in a controlled environment. Students examine and practice teaching strategies, learning styles, time management and planning strategies, presentation
	19153	Early Childhood Education	and questioning skills, classroom management, and evaluation techniques. Early Childhood Education courses address child development, care, and education issues, so that students can guide the development of young children in an educational setting. Study typically includes planning and implementing developmentally appropriate activities, basic health and safety practices, and legal requirements for teaching young children.
	19154	Particular Topics in Education	These courses examine specific topics in education other than those already described, such as management of school-age children, rather than providing a general study of the teaching profession.

Course Grade	Course Code	Course Name	Course Description
	n Services		······································
Education			
	19197	Education—Independent Study	Education—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to education. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	19198	Education—Workplace Experience	Education—Workplace Experience courses provide students with work experience in fields related to education. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	19199	Education—Other	Other Education Carecourses.
Apparel and	Furnishings		
	19201	Clothing and Textiles	Clothing and Textiles courses introduce students to and expand upon the various aspects of apparel, garment construction, and the textile industry, conveying the commercial application of design principles, production processes, and maintenance techniques. These courses usually address the selection, characteristics, care, and repair of various textiles; operation and care of commercial sewing machines; design, construction, and production of fabrics and/or garments; and career opportunities in the garment or textile industry.
	19202	Clothing/Textile Maintenance	Clothing/Textile Maintenance courses provide students with the knowledge and skills to clean, care for, and maintain clothing and textiles. Course topics typically include dry cleaning and laundering techniques, identifying fabrics and the optimal cleaning agents and processes, instruction in altering and repairing garments, and the safe use of the equipment, tools, and agents.
	19203	Apparel Construction	Apparel Construction courses provide students with the knowledge and skill to construct, alter, and repair clothing and textile products. Course topics typically include taking measurements, creating and preparing patterns, and various sewing techniques; topics may also include customer service, fashion design principles, and business management. These courses may also offer specialized knowledge in a particular type of garment.
	19204	Apparel and Textile Services	Apparel and Textile Services courses introduce students to and expand upon various services that concern the care and maintenance of apparel, textiles, and furnishing. Course topics may include upholstery, dry cleaning, commercial sewing, and tailoring.
	19205	Home Furnishing	Home Furnishing courses provide students with basic knowledge regarding furnishing and decorating home environments. While exploring design principles, personal needs and style, and decision-making, students may also explore the following topics: color, texture, furniture styles and arrangement, lighting, window treatments, floor and wall coverings, and home improvement/modification. Home Furnishing courses may also cover architectural style and design and take a larger look at housing problems or current housing issues.
	19206	Home Furnishings Production	Home Furnishings Production courses enable students to plan, select, and construct upholstery, slip covers, draperies and other window treatments, and other home accessories. Some courses may emphasize upholstery exclusively. Course content typically includes proper use of equipment, interior decorating principles, and employability skills.
	19207	Particular Topics in Apparel and Furnishings	These courses examine specific topics in apparel and furnishings other than those already described, such as tailoring or shoe repair, rather than providing a general study.
	19247	Apparel and Furnishings—Independent Study	Apparel and Furnishings—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to apparel, textiles, and furnishings. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.
	19248	Apparel and Furnishings—Workplace Experience	Apparel and Furnishings—Workplace Experience courses provide students with work experience in fields related to apparel, textiles, and furnishings. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	19249	Apparel and Furnishings—Other	Other Apparel and Furnishings Carecourses.
	19995	Human Services—Aide	Human Services—Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students.
	19997	Human Services—Independent Study	Human Services—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to providing human services. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

NC	CES	Second	lary	School	Cour	ses
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Course Grade	Course Code	Course Name	Course Description
019 - Hum	an Services		
	19998	Human Services—Workplace Experience	Human Services—Workplace Experience courses provide students with work experience in a field related to the provision of human services. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	19999	Human Services—Other	Other Human Services Care courses.
)20 - Tran	sportation, I	Distribution, and Logistics	
ransportat	tion Technolo	gy	
	20001	Exploration of Transportation, Distribution and Logistics	Exploration of Transportation, Distribution, and Logistics courses introduce students to careers that involve the planning, management, and movement of people, materials, and products using any of several modes of transport. Such careers may also involve infrastructure, vehicular maintenance and repair, and operating or managing facilities that hold what is being transported. Therefore, specific course topics vary widely and depend upon the careers being explored.
Operation			
	20051	Truck and Bus Driving	Truck and Bus Driving courses instruct students in the proper and safe handling and operation of trucks and buses. Strategies for driving in hazardous conditions, observing laws and regulations, loading cargo or passengers, documenting cargo loads, and expectations of driving careers are all
	20052	Heavy Equipment Operation	typical course topics. Heavy Equipment Operation courses enable students to safely operate the heavy equipment used for mining, construction, and utility industries. Typically, courses also include light maintenance principles and techniques.
	20053	Aviation	Aviation courses provide students with an understanding of the science of flight and typically include the history, regulations, and possible career paths within the aviation industry. Aviation courses usually cover physics, the relationships of weight and balance, principles of navigation and flight control, ground and airport operations and services, and Federal Aviation Agency
	20054	Boat Operation	regulations. Boat Operation courses typically cover operation and maintenance of marine vehicles, marine navigation, and emergency procedures, as well as other skills necessary or useful for work or life at sea (e.g., loading and unloading or cooking). Specific topics may include docking and undocking
	20097	Operation—Independent Study	a vessel, engine maintenance, commercial fishing, firefighting aboard ship, and CPR. Operation—Independent Study courses, often conducted with instructors as mentors, enable students to explore topics of interest related to the operation of vehicles. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular
	20098	Operation—Workplace Experience	application, to explore a topic in greater detail, or to develop more advanced skills. Operation—Workplace Experience courses provide students with work experience in fields related to the operation of vehicles. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that
	20099	Operation—Other	students encounter in the workplace. Other Operation courses.
lechanics	and Repair		
	20101	Energy/Power	Energy/Power courses focus on one or several aspects of energy and power in transportation and work. Course content may include various sources of energy and their use in society (for example, characteristics, availability, conversion, storage, environmental impact, and socioeconomic aspects of various energy sources); principles involved in various means of energy transfer, such as electricity/electronics, hydraulics, pneumatics, heat transfer, and wind/nuclear/solar energies; and the transmission and control of power through mechanical or electrical devices such as motors and engines.
	20102	Power and Mechanics	Power and Mechanics courses enable students to understand the principles underlying various kinds of mechanics (aircraft, auto, diesel, and marine) and how energy is converted, transmitted, and controlled. Topics typically include maintaining and servicing machines, engines, and devices while emphasizing energy sources, electricity, and power transmission. The courses may also
	20103	Introduction to Automobiles	provide information on career opportunities within the field of mechanics and/or transportation. Primarily intended as a personal automobile mechanics course, but also useful for students exploring future careers in automotive technologies, Introduction to Automobiles courses expose students to the various mechanical systems in automobiles and provide basic experience in maintenance tasks. The course may also cover career opportunities in the automotive and/or transportation fields.

ourse	Course	Course Name	Course Description
rade 20 - Trans	Code	Course Name Distribution, and Logistics	Course Description
	and Repair	Distribution, and Logistics	
	20104	Automotive Mechanics—Comprehensive	Automotive Mechanics—Comprehensive courses emphasize the diagnosis and repair of automobile engines and support systems such as brakes, cooling, drive trains, electrical/electronics components, emission, fuel, ignition, steering, suspension, and transmissions. Course topics often include the comprehension and use of repair manuals, safety, and employability skills (including shop management and entrepreneurship).
	20105	Particular Topics in Automotive Mechanics	These courses provide instruction in the mechanics of a particular system or condition, such as transmissions, brakes, fuel, exhaust, or electrical systems, rather than providing a general study of diagnosis and repair of automobile mechanics.
	20106	Automotive Service	Automotive Service courses emphasize preventative auto maintenance and automobile troubleshooting. Course content typically includes tune-up, oil change, and lubrication skills; tire replacement, alignment, and balancing; and basic knowledge of brake, cooling, electrical, emission, fuel, ignition, steering, suspension, and transmission systems. These courses may also include public relations, sales techniques, and service station management.
	20107	Diesel Mechanics—Comprehensive	Diesel Mechanics—Comprehensive courses prepare students to maintain and repair diesel engines and related systems. Specific course topics may include principles underlying diesel engines, analyzing electrical circuits and systems, troubleshooting and repairing cooling systems, testing and repairing air conditioning charging systems, reading and interpreting service manuals, and identifying the principles and components of fuel injection systems. Courses may also cover safety, employability skills, and entrepreneurship.
	20108	Particular Topics in Diesel Mechanics	These courses cover specific topics relevant to occupations involving the maintenance and repair of vehicles with diesel engines, such as buses and trucks. One topic (or several closely related topics) concerning diesel mechanics is covered in specific detail in this type of course.
	20109	Small Vehicle Mechanics	Small Vehicle Mechanics courses equip students with the knowledge and skill to repair and maintain engines in small vehicles (e.g., motorcycles, all-terrain vehicles, snowmobiles, and mopeds). Topics include (but are not limited to) maintaining frames and suspension, wheels and brakes, and drive trains; servicing fuel, exhaust, and electrical systems; performing tune-ups; and maintaining and repairing engines. Students may also learn safety on the job, employability skills,
	20110	Small Engine Mechanics	and entrepreneurship. Small Engine Mechanics courses provide students with the opportunity to learn how to service and recondition small engines, typically emphasizing two- and four-cycle engines. These courses provide students with opportunities to troubleshoot and repair speed controls, lubrication, ignition, fuel, power transfer, cooling, exhaust, and starting systems; use hand, power, and overhaul tools; and read and interpret service manuals and parts' catalogs. Applications may include lawn
	20111	Marine Mechanics	mowers, tractors, tillers, power tools, and so on. The content of Marine Mechanics courses includes the service and repair of electrical, mechanical, power transfer, hydraulic, fuel, and cooling systems as applied to boat and/or ship engines; boat rigging; trailers; and marine-related merchandise. Courses may also cover communication, human
	20112	Heavy Equipment Mechanics	relations, and employability skills, as well as safe, efficient work practices. Heavy Equipment Mechanics courses include the service and repair of electrical, mechanical, power transfer, hydraulic, fuel, and cooling systems of heavy equipment such as that used in mining, construction, and utility industries.
	20113	Aircraft Power Plant	Aircraft Power Plant courses provide students with the information necessary to troubleshoot, test, repair, and install aircraft engines. Course content usually includes engine ignition, electrical, lubrication, cooling, exhaust, and fuel systems, along with aircraft instrumentation and safety features.
	20114	Aircraft Airframe	Aircraft Airframe courses offer students information and instruction related to the structure and mechanics of aircraft, typically including hydraulic, pneumatic, instrumental, fuel, electrical, cabin atmosphere, and landing gear systems. Aircraft Airframe courses may also cover aircraft metals and coverings and related welding skills.
	20115	Automotive Detailing and Reconditioning	Automotive Detailing and Reconditioning courses provide students with knowledge and skills related to repairing, refinishing, and detailing automobiles. Course topics typically include painting and refinishing, plastics and adhesives, damage analysis, and repair, in addition to occupational safety, employability, and entrepreneurship skills.
	20116	Automotive Body Repair and Refinishing—Comprehensive	Automotive Body Repair and Refinishing courses provide students with knowledge and skills regarding the repair and refinishing of damaged or used cars. Course content may include (but is not limited to) stretching and shrinking auto body sheet metal; welding skills; frame and metal straightening; repair of fiberglass and synthetic materials; removing, repairing, and installing auto body parts such as panels, hoods, doors, and windows/glass; preparing vehicles and vehicle surfaces for refinishing; painting; applying body fillers; and estimating material and labor costs.

NCES Secondary School Courses

Grade Code Course Name Course Description 7020 - Transportation, Distribution, and Logistics 802017 Particular Topics in Automotive Body Repair and Refinishing of automobile bodies and surfaces. One topic or several closely related topics (such as a nonstructural part replacement, auto body welding, or plastic repair) receive particular and this type of course. 8041 Boat Repair/Refinishing 805 Repair/Refinishing courses convey a broad range of information and skills about ho and refinish boat mechanics, structures, and surfaces. In these courses, students become proficient in marine terminology, learn how to describe types of marine manufacturing and occupations, and prepare new and existing wood, fiberglass, and metal surfaces for pair refinishing. These courses often cover safety, employability skills, and entrepreneurship. Mechanics and Repair—Independent Study courses may serve as an opportunity for students to expand their exp particular application, to explore a topic in greater detail, or to develop more advanced skills repair. Workplace Experience for the maintenance of vehicles and experience courses provide students with work experience for the maintenance of vehicles and experience students to explore the student, teacher, and employer (although students are not necessarily paid). These courses of the maintenance of vehicles and experience students are sufficient elections. The students are not necessarily paid). These course of the students are sufficient delivery of commodities to various markets. Course content typically in comparative advantages of various from the original paid and repair courses. 801517 Warehouse Operations 801518 Warehouse Operations courses provide students with knowledge and skills related safe and efficient delivery of commodities to various markets. Course content typically in comparative advantages of various forms of fransportation, distribution enhovits, process tracking large shipments of material, transportation, distribution enhovits, process tracking large shi	
Mechanics and Repair 20117 Particular Topics in Automotive Body Repair and Refinishing of automobile bodies and surfaces. One topic or several closely related topics (such as nonstructural part replacement, auto body welding, or plastic repair) receive particular at this type of course. 20118 Boat Repair/Refinishing Boat Repair/Refinishing ocurses convey a broad range of information and skills about hor and refinish boat mechanics, structures, and surfaces. In these courses, students become proficient in marine terminology, learn how to describe types of marine manufacturing am occupations, and prepare new and existing wood, fiberglass, and metal surfaces for pain refinishing. These courses often cover safety, employability skills, and entrepreneurship. 20147 Mechanics and Repair—Independent Study Courses and Repair—Independent Study courses, often conducted with instructors as enable students to explore topics of interest related to the maintenance of vehicles and e independent Study courses may serve as an opportunity for students to expand their expair—Vorkplace Experience courses provide students with work experiences that students are not necessarily paid). These courses often cover safety, employability skills, and entrepreneurship articular application, to explore a topic in greater detail, or to develop more advanced sk mechanics and Repair—Independent Study courses may serve as an opportunity for students to expand their expair and repair—Workplace Experience courses provide students with work experiences that students are not necessarily paid). These courses provide students with knowledge and skills related safe and efficient delivery of commodities to various markets. Course content typically in comparative advantages of various forms of transportation of goods in a safe and secure manne packaging. 20152 Warehouse Operations Warehouse Operations courses convey the principles and processes underlying the rece loading and unloading, tracking, and storing of large quantities of materials. Course t	
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Body Repair and Refinishing of automobile bodies and surfaces. One topic or several closely related topics (such as nonstructural part replacement, auto body welding, or plastic repair) receive particular att this type of course. Boat Repair/Refinishing Boat Repair/Refinishing Boat Repair/Refinishing ourses convey a broad range of information and skills about ho and refinish boat mechanics, structures, and surfaces. In these courses, students become proficient in marine terminology, learn how describe types of marine manufacturing an occupations, and prepare new and existing wood, fiberglass, and metal surfaces for pain refinishing. These courses often cover safety, employability skills, and entrepreneurship. Mechanics and Repair—Independent Study courses, often conducted with instructors as enable students to explore topics of interest related to the maintenance of vehicles and e Independent Study courses any serve as an opportunity for students to expand their exp particular application, to explore a topic in greater detail, or to develop more advanced sk Mechanics and Repair—Workplace Experience courses provide students with work experience for the students of the student, teacher, and employer (although students are not necessarily paid). These c may include classroom activities as well, involving further study of the field or discussion experiences sthat students encounter in the workplace. Other Mechanics and Repair courses. Distribution and Logistics 20152 Warehouse Operations Distribution—Comprehensive courses provide students with knowledge and skills related safe and efficient delivery of commodities to various markets. Course content typically incomparative advantages of various forms of transportation, distribution networks, process tracking large shipments of material, transportation of goods in a safe and secure manne packaging. Warehouse Operations courses convey the principles and processes underlying the rece loading and unloading, tracking, and storing of large quantities of materials.	
Boat Repair/Refinishing Boat Repair/Refinishing and refinish boat mechanics, surfucers, and surfaces. In these courses, students become proficient in marine terminology, learn how to describe types of marine manufacturing an occupations, and prepare new and existing wood, fiberglass, and metal surfaces for paint refinishing. These courses often cover safety, employability skills, and entrepreneurship. Mechanics and Repair—Independent Study courses, often conducted with instructors as Repair—Independent Study courses, often conducted with instructors as enable students to explore topics of interest related to the maintenance of vehicles and e Independent Study courses may serve as an opportunity for students to expand their exp particular application, to explore a topic in greater detail, or to develop more advanced sk Mechanics and Repair—Workplace Experience Courses provide students with work experiences and Repair—Workplace Experience Courses provide students with work experiences that students encounter in the workplace. 20149 Mechanics and Repair—Other Other Mechanics and Repair courses. Distribution and Logistics 20151 Distribution—Comprehensive Distribution—Comprehensive Courses provide students with knowledge and skills related safe and efficient delivery of commodities to various markets. Course content typically incomparative advantages of various forms of transportation, distribution entworks, process tracking large shipments of material, transportation of goods in a safe and secure manne packaging. 20152 Warehouse Operations Warehouse Operations courses convey the principles and processes underlying the rece loading and unloading, tracking, and storing of large quantities of materials. Course topic include a variety of logistical implications for moving materials by several different modes transportation, safely and security, and appropriate storage techniques. 20197 Distribution and Logistics—Hotependent Study courses, often conducted with instructors mentors, enable students to explore topics	-
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Logistics—Workplace in fields related to distribution and logistics. Goals are typically set cooperatively by the st teacher, and employer (although students are not necessarily paid). These courses may	ertise in a
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20199 Distribution and Logistics—Other Other Distribution and Logistics courses.	
Transportation, Distribution and Logistics—Aide courses offer students the opportunity to instructors in preparing, organizing, or delivering course curricula. Students may provide instructional assistance to other students.	
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20999 Transportation, Distribution and Other Transportation, Distribution and Logistics courses. Logistics—Other	

021 - Engineering and Technology

Engineering

Course	Course		
Grade	Code	Course Name	Course Description
•	•	l Technology	
Engineering	21007	Engineering Design and Development	Engineering Design and Development courses provide students with the opportunity to apply engineering research principles as they design and construct a solution to an engineering problem. Students typically develop and test solutions using computer simulations or models but eventually
	21008	Digital Electronics	create a working prototype as part of the design solution. Digital Electronics courses teach students how to use applied logic in the development of electronic circuits and devices. Students may use computer simulation software to design and test digital
	21009	Robotics	circuitry prior to the actual construction of circuits and devices. Robotics courses develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers.
	21010	Computer Integrated Manufacturing	Computer Integrated Manufacturing courses involve the study of robotics and automation. Building on computer solid modeling skills, students may use computer numerical control (CNC) equipment to produce actual models of their three-dimensional designs. Course topics may also include fundamental concepts of robotics, automated manufacturing, and design analysis.
	21011	Civil Engineering	Civil Engineering courses expose students to the concepts and skills used by urban planners, developers, and builders. Students may be trained in soil sampling and analysis, topography and surveying, and drafting or blueprint-reading. Additional course topics may include traffic analysis,
	21012	Civil Engineering and Architecture	geologic principles, and urban design. Civil Engineering and Architecture courses provide students with an overview of the fields of Civil Engineering and Architecture while emphasizing the interrelationship of both fields. Students typically use software to address real world problems and to communicate the solutions that they develop. Course topics typically include the roles of civil engineers and architects, project-planning,
	21013	Aerospace Engineering	site-planning, building design, project documentation, and presentation. Aerospace Engineering courses introduce students to the world of aeronautics, flight, and engineering. Topics covered in the course may include the history of flight, aerodynamics and aerodynamics testing, flight systems, astronautics, space life systems, aerospace materials, and
	21014	Biotechnical Engineering	systems engineering. Biotechnical Engineering courses enable students to develop and expand their knowledge and skills in biology, physics, technology, and mathematics. Course content may vary widely, drawing upon diverse fields such as biomedical engineering, biomolecular genetics, bioprocess engineering, agricultural biology, or environmental engineering. Students may engage in problems related to biomechanics, cardiovascular engineering, genetic engineering, agricultural biotechnology, tissue engineering, biomedical devices, human interfaces, bioprocesses, forensics, and bioethics.
	21015	Particular Topics in Engineering	These courses examine specific topics in engineering other than those already described.
	21048	Engineering—Workplace Experience	Engineering—Workplace Experience courses provide students with work experience in an engineering-related field. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
Technology	,		
	21052	Technological Processes	Technological Processes courses provide students with the opportunity to focus on one or more areas of industrial technology, applying technological processes to solve real problems and developing the knowledge and skills to design, modify, use, and apply technology appropriately. Students may examine case studies, explore simulations, or design and build prototypes and working models.
	21053	Emerging Technologies	Emerging Technologies courses emphasize students' exposure to and understanding of new and emerging technologies. The range of technological issues varies widely but typically include lasers, fiber options, electronics, robotics, computer technologies, CAD/CAM, communication modalities, and transportation technologies.
	21054	Technology Innovation and Assessment	Technology Innovation and Assessment courses use engineering design activities to help students understand how criteria, constraints, and processes affect design solutions and provide students with the skills to systematically assess technological developments or solutions. Course topics may
	21055	Aerospace Technology	include brainstorming, visualizing, modeling, simulating, constructing, testing, and refining designs. Aerospace Technology courses introduce students to the technology systems used in the aerospace industry and their interrelationships. Examples of such systems include satellite communications systems, composite materials in airframe manufacturing, space station
	21056	Particular Topics in Technology Applications	constructions techniques, space shuttle propulsion systems, aerostatics, and aerodynamics. These courses examine specific topics in technology applications other than those already described.

Course	Course		
Grade	Code	Course Name	Course Description
_	_	Technology	
Technology	21098	Technology—Workplace Experience	Technology—Workplace Experience courses provide students with work experience in a field related to technological systems and structures. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	21099	Technology—Other	Other Technology courses.
Drafting			
	21101	Drafting Careers Exploration Drafting—General	Geared for students with an interest in careers that use drafting skills and applications, Drafting Careers Exploration courses expose students to the opportunities available for draftspeople (engineering, architectural, industrial, and so on). These courses serve to introduce basic skills and the field in general, providing students with the opportunity to identify a focus for continued study or to determine that their interests lie elsewhere. Drafting—General courses, usually offered as a sequence of courses, introduce students to the
			technical craft of drawing illustrations to represent and/or analyze design specifications and then refine the skills necessary for this craft. Drafting—General courses use exercises from a variety of applications to provide students with the knowledge and experience to develop the ability to perform freehand sketching, lettering, geometric construction, and multiview projections and to produce various types of drawings (working, detail, assembly, schematic, perspective, and so on). Computer-aided drafting (CAD) systems (if available) are typically introduced and used to fulfill course objectives.
	21103	Drafting—Architectural	Drafting—Architectural courses introduce students to and help them refine the technical craft of drawing illustrations to represent and/or analyze design specifications, using examples drawn from architectural applications. These courses are intended to help students develop general drafting skills, but place a particular emphasis on interior and exterior residential (and light commercial) design, site orientation, floor plans, electrical plans, design sketches, and presentation drawings. In addition, students may prepare scale models.
	21104	Drafting—Civil/Structural	Drafting—Civil/Structural courses introduce students to and help them refine the technical craft of drawing illustrations to represent and/or analyze design specifications, using examples drawn from civil engineering and/or structural applications. These courses are intended to help students develop general drafting skills, but place a particular emphasis on skills needed for typography and survey work.
	21105	Drafting—Electrical/Electronic	Drafting—Electrical/Electronic courses introduce students to and help them refine the technical craft of drawing illustrations to represent and/or analyze design specifications, using examples drawn from electric and/or electronic fields. These courses are intended to help students develop general drafting skills, but place a particular emphasis on those skills needed for electrical and electronic schematics.
	21106	Drafting—Technical/Mechanical	Drafting—Technical/Mechanical courses introduce students to and help them refine the technical craft of drawing illustrations to represent and/or analyze design specifications, using examples drawn from industrial applications. These courses are intended to help students develop general drafting skills, but place a particular emphasis on sectioning, auxiliary views, revolutions, and surface development. In these courses, students typically learn basic machining and fabrication processes as they draw schematic diagrams featuring cams, gears, linkages, levers, pulleys, and so on.
	21107	CAD Design and Software	Frequently offered as an intermediary step to more advanced drafting courses (or as a concurrent course), CAD Design and Software courses introduce students to the computer-aided drafting systems available in the industry.
	21108	Blueprint Reading	Blueprint Reading courses provide students with the knowledge and ability to interpret the lines, symbols, and conventions of drafted blueprints. They generally emphasize interpreting, not producing, blueprints, although the courses may provide both types of experiences. Blueprint Reading courses typically use examples from a wide variety of industrial and technological applications.
	21148	Drafting—Workplace Experience	Drafting—Workplace Experience courses provide work experience in a field related to drafting. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
	21149	Drafting—Other	Other Drafting courses.
All Others			

NCES Se	condary S	chool Courses	
Course	Course		
Grade	Code	Course Name	Course Description
021 - Engi	neering and	I Technology	
All Others	0.400.5		
	21995	Engineering and	Engineering and Technology—Aide courses offer students the opportunity to assist instructors in
		Technology—Aide	preparing, organizing or delivering course curricula. Students may provide tutorial or instructional assistance to other students.
	21998	Engineering and	Engineering and Technology—Workplace Experience courses provide students with work
		Technology—Workplace	experience in a field related to engineering or technology. Goals are typically set cooperatively by
		Experience	the student, teacher, and employer (although students are not necessarily paid). These courses
			may include classroom activities as well, involving further study of the field or discussion regarding
noo Mico	ollanoous		experiences that students encounter in the workplace.
	ellaneous		
Academic I	Enrichment 22003	Study Skills	Ctudy Chille acurace prepare attudents for augusta in high asheel and/or for nectocondens
	22003	Study Skills	Study Skills courses prepare students for success in high school and/or for postsecondary education. Course topics may vary according to the students involved, but typically include reading
			improvement skills, such as scanning, note-taking, and outlining; library and research skills; listening
			and note-taking; vocabulary skills; and test-taking skills. The courses may also include exercises
			designed to generate organized, logical thinking and writing.
	22004	Dropout Prevention Program	Dropout Prevention Program courses vary widely, but typically are targeted at students who have
			been identified as being at risk of dropping out of or failing in school. Course content may include study skills and individual tutorials; job preparation, readiness, application, or interview skills;
			communication skills; personal assessment and awareness activities; speaker presentations; and
			small group seminars.
	22006	Study Hall	Study Hall courses provide students with the opportunity and time to complete classroom
			assignments or school projects. Students typically work on their own, without the help of a tutor;
Staff Assist	tonoo		however, they are supervised and usually remain in the classroom.
Staff Assist	22051	Office Aide	Office Aide courses provide students with the opportunity to work in campus offices, developing
			skills related to clerical office work. Duties may include typing, filing, record-keeping, receiving
			visitors, answering the telephone, and duplicating, among others. These courses emphasize
			appropriate work attitudes, human relations, and proper office procedures.
	22052	Guidance Aide	Guidance Aide courses provide students with the opportunity to work in the campus guidance
			office. Duties may include typing, filing, record-keeping, assisting students, answering the telephone, and duplicating, among others. Students may also act as guides to new students. These
			courses emphasize appropriate work attitudes, human relations, and proper office procedures.
	22053	Library/AVC Aide	Library/AVC Aide courses provide students with the opportunity to work in the library or in media
			and audiovisual centers. Duties may include collecting, distributing, and categorizing materials;
			operating audiovisual equipment; assisting students and teachers; and performing clerical duties.
) - l I O		ada aa bira	Students typically gain experience in library science and/or media and audiovisual technology.
cnool Org	anization/Lea 22101	Leadership	Leadership courses are designed to strengthen students' personal and group leadership skills.
	22101	Leadership	Typically intended for students involved in extracurricular activities (especially as officers of
			organizations or student governing bodies), these courses may cover such topics as public
			speaking, effective communication, human relations, parliamentary law and procedures,
			organization and management, and group dynamics.
	22104	Community Service	Community Service courses provide students with the opportunity to volunteer their time, energy,
			and talents to serve a community project or organization. These courses are usually (but not always) conducted with a seminar component, so that students can use their volunteer
			experiences to learn how to solve problems, make decisions, and communicate effectively.
Career Exp	loration/Deve	elopment	· [· · · · · · · · · · · · · · · · · ·
	22151	Career Exploration	Career Exploration courses help students identify and evaluate personal goals, priorities, aptitudes,
			and interests with the goal of helping them make informed decisions about their careers. These
			courses expose students to various sources of information on career and training options and may
amily and	Canaumar 6	aianaa	also assist them in developing job search and employability skills.
anny and	Consumer S 22201	Family and Consumer	Family and Consumer Science—Comprehensive courses are inclusive studies of the knowledge
		Science—Comprehensive	and skills that are useful for the efficient and productive management of the home. Course topics
		r	typically include foods and nutrition; clothing; child development and care; housing design,
			decoration, and maintenance; consumer decisions and personal financial management; and

interpersonal relationships.

ICES Second	ary School	Courses
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Course Grade	Course Code	Course Name	Course Description
)22 - Misce			
amily and 0	Consumer So	ience	
	22202	Food and Nutrition	Food and Nutrition courses provide students with an understanding of food's role in society, instruction in how to plan and prepare meals, experience in the proper use of equipment and utensils, and background on the nutritional needs and requirements for healthy living. Some classes place a heavier emphasis on the nutritional components of a balanced diet, while others concentrate on specific types of food preparation. Although these courses may present career opportunities in the food service industry, their emphasis is not career-related.
	22203	Food Science	Food Science courses offer opportunities to study the composition, structure, and properties of foods and the chemical changes that occur during the processing, storage, preparation, and consumption of food. These courses often explore the effects of various materials, microorganisms, and processes on food products through laboratory experiments.
	22204	Child Development/Parenting	Child Development/Parenting courses provide students with knowledge about the physical, mental, emotional, and social growth and development of children from conception to pre-school age. In addition, these courses help students discover how parents should respond to the various stages of childhood. Course content typically includes topics such as prenatal and birth processes; responsibilities and difficulties of parenthood; fundamentals of children's emotional and physical development; and the appropriate care of infants, toddlers, and young children.
	22205	Clothing/Sewing	Clothing/Sewing courses introduce students to and expand their knowledge of various aspects of wearing apparel, sewing, and fashion. These courses typically include wardrobe planning; selection, care, and repair of various materials; and construction of one or more garments. They may also include related topics, such as fashion design, fashion history, the social and psychological aspects of clothing, careers in the clothing industry, and craft sewing.
	22206	Life Skills	Life Skills courses provide students with information about a wide range of subjects to assist them in becoming wise consumers and productive adults. These courses often emphasize such topics as goal-setting, decision-making, and setting priorities; money and time management; relationships; and the development of the self. Practical exercises regarding selecting and furnishing houses, meeting transportation needs, preparing food, selecting clothing, and building a wardrobe are often integral to these classes. In addition, specific topics such as insurance, taxation, and consumer protection may also be covered.
	22208	Family Living	Family Living courses emphasize building and maintaining healthy interpersonal relationships among family members and other members of society. These courses often emphasize (but are not limited to) topics such as social/dating practices, human sexuality and reproduction, marriage preparation, parenthood and the function of the family unit, and the various stages of life. They may also cover topics related to individual self-development, career development, personal awareness, and preparation for the responsibilities of a family member and wage earner.
	22210	Consumer Economics/Personal Finance	Consumer Economics/Personal Finance courses provide students with an understanding of the concepts and principles involved in managing one's personal finances. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection. These courses may also provide an overview of the American economy.
	22211	Home Décor	Home Décor courses provide students with knowledge and skills regarding interior design and decoration of the home for the individual or family. While exploring design principles, personal needs and style, and decision-making, students may have an opportunity to explore such topics as color, texture, furniture styles and arrangement, lighting, window treatments, floor and wall coverings, and home improvement/modification. These courses emphasize personal (rather than commercial) use and application of home décor principles.
	22249	Family and Consumer Science—Other	Other Family and Consumer Science courses.
upport Ser			
	22251	Community Living	Community Living courses place a special emphasis on the student's relationship to the surrounding community. Instruction varies with the students and their needs; however, these courses provide the skills necessary for independent functioning within the surrounding environment. Course topics may also include available community resources and how to access them, emergency skills, and

Course	Course		
Grade	Code	Course Name	Course Description
022 - Misc	ellaneous		
Support Se	rvices		
	22252	Communication Instruction	Communication Instruction courses are typically individualized according to each student's condition and needs. Increasing the student's communication skills—oral expression, listening comprehension, reading, and writing—is emphasized; communication techniques in several areas (educational, social, and vocational) are often explored.
	22253	Social Development Instruction	Social Development Instruction courses teach students the social skills needed for independent functioning within the community. Topics may include self-control, self-expression, obeying rules, decision-making, appropriate situational behavior, interacting with others, and maintaining relationships. Students may develop independence, self-confidence, and self-reliance.
	22254	Developmental Support	Developmental Support courses are customized according to each student's condition and needs, emphasizing an increase in skill or control of body and mind function. Examples of support may include refinement of gross and fine motor skills, development of visual perception, and improvement in eyehand coordination.
All Others	22995	Miscellaneous—Aide	Miscellaneous—Aide courses offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula or to assist other staff members in fulfilling their duties. Students may provide tutorial or instructional assistance to other students. Note: if the particular subject area is known, use the code associated with the Aide course within that subject area.
	22997	Miscellaneous—Independent Study	Miscellaneous—Independent Study courses, typically organized as a mentorship with a teacher or outside professional, enable students to conduct investigations related to their field(s) of interest. Note: if the particular subject area is known, use the code associated with the Independent Study course within that subject area.
	22999	Miscellaneous—Other	Other Miscellaneous courses.